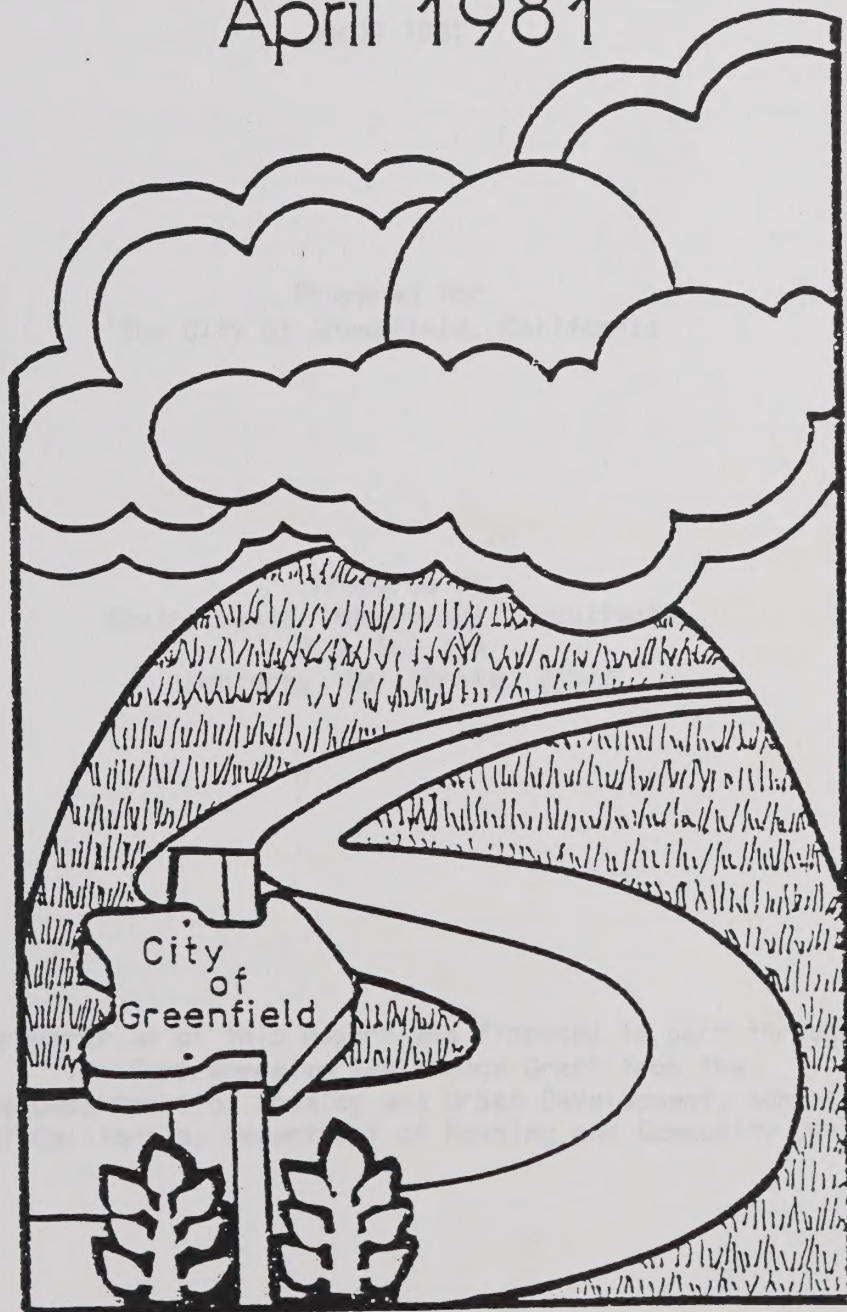


City of Greenfield
General Plan and
Environmental Impact
Report

April 1981



Prepared by
Environmental Management Consultants

Draft
General Plan
for Greenfield

April 1981

Prepared for
The City of Greenfield, California

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The City of Seattle, WA

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INTRODUCTION

PLANNING MANAGEMENT SYSTEM

Purpose

A Planning Management System is being prepared for Greenfield, Gonzales and Soledad in the Salinas Valley. Once completed, this system will serve three functions:

- 1) It will provide policy directions and programs to address future land use, housing and circulation issues;
- 2) It will provide the Cities with base environmental data to use during evaluation of future projects; and
- 3) It will provide a Resource Evaluation and Implementation Format to aid the assessment of future urban service capacities. This can then be used in the review of proposed developments, and in planning for capital improvement programs.

Format and Scope

The Planning Management System will consist of three documents: Policy Plans for three General Plan Elements, a Master Environmental Impact Report, and a Resource Evaluation and Implementation Format.

This document constitutes the Policy Plans for the General Plan Elements for Land Use, Housing and Circulation. Each element describes local issues, identifies City goals based on general desires of the community, and develops policies to provide planning direction to address identified issues. Programs are then identified to provide specific actions to implement the policies. Included within the elements are Land Use Plan and Circulation Plan Maps.

The Policy Plans are intended to be reviewed every five years so that they may be kept current as the community develops.

The Master Environmental Impact Report (EIR) will serve two functions. It will provide base data in all areas of environmental concern so that the City will have complete information to assist their environmental review process. The EIR also will relate the Policy Plans to environmental issues.

Finally, a Resource Evaluation and Implementation Format will help the City to define urban service capacities. It will allow the City to plan for future development and to provide a mechanism to update and revise the Policy Plans.

GENERAL PLAN ELEMENTS

Purpose and Intent

A General Plan is a community's commitment to how they would like to change over time. It is a policy statement of the city's intentions for the future and, as such, serves as a useful tool for local decision-makers. The City of

Greenfield's General Plan Revision is the result of more than six months of work by the Planning Commission, City Council, a Citizens Advisory Committee, City Staff and consultants. It represents a guide for future planning decisions in the City in regard to Land Use, Housing and Circulation Issues.

The Plan is comprehensive in nature in that it addresses the physical, social and economic concerns and interests raised during the General Plan Revision process by the participating groups, committees and individuals in Greenfield. It is also a general policy statement, providing direction for planning decisions and the opportunity for revision as community values and circumstances change, and as local, state or national trends or events affect the activities of the community.

State law requires and provides for a General Plan that looks at all aspects of physical growth. This new plan is long-range and comprehensive, and forms the City's future policy statement regarding Land Use, Housing and Circulation issues. However, it also is intended to provide specific guidance in regard to solving today's problems. The policies and programs are designed to establish the basis for present and future land use decisions. Some proposals can be carried out now; others may be fifteen to twenty years in the future.

Description of Elements

California State law requires that each local jurisdiction prepare and adopt a General Plan (Government Code, beginning with section 65300). A General Plan is a blueprint for future city development and consists of nine required elements, each addressing a specific planning subject area.

The Land Use and Circulation Elements were the first General Plan elements and have been required by State law since 1957. The Housing Element became a requirement in 1969. During the early 1970s State law was modified to include requirements for six additional elements -- Conservation, Open Space, Noise, Seismic Safety, Scenic Highways, and Safety. Each of these elements is designed to address specific city problems and to provide policy direction that deals with such problems.

The City of Greenfield has met State requirements by adopting all nine General Plan elements. The present revision process is an updating of the Land Use, Housing and Circulation Elements of the City. The basic elements of Land Use and Circulation were adopted in 1968 and revised in 1973. The Housing Element was adopted in 1971. All other elements were adopted by 1975. The 1981 General Plan revision has been a comprehensive approach to revising the Land Use, Circulation and Housing Elements, while considering and incorporating the basic policy contained in each General Plan element.

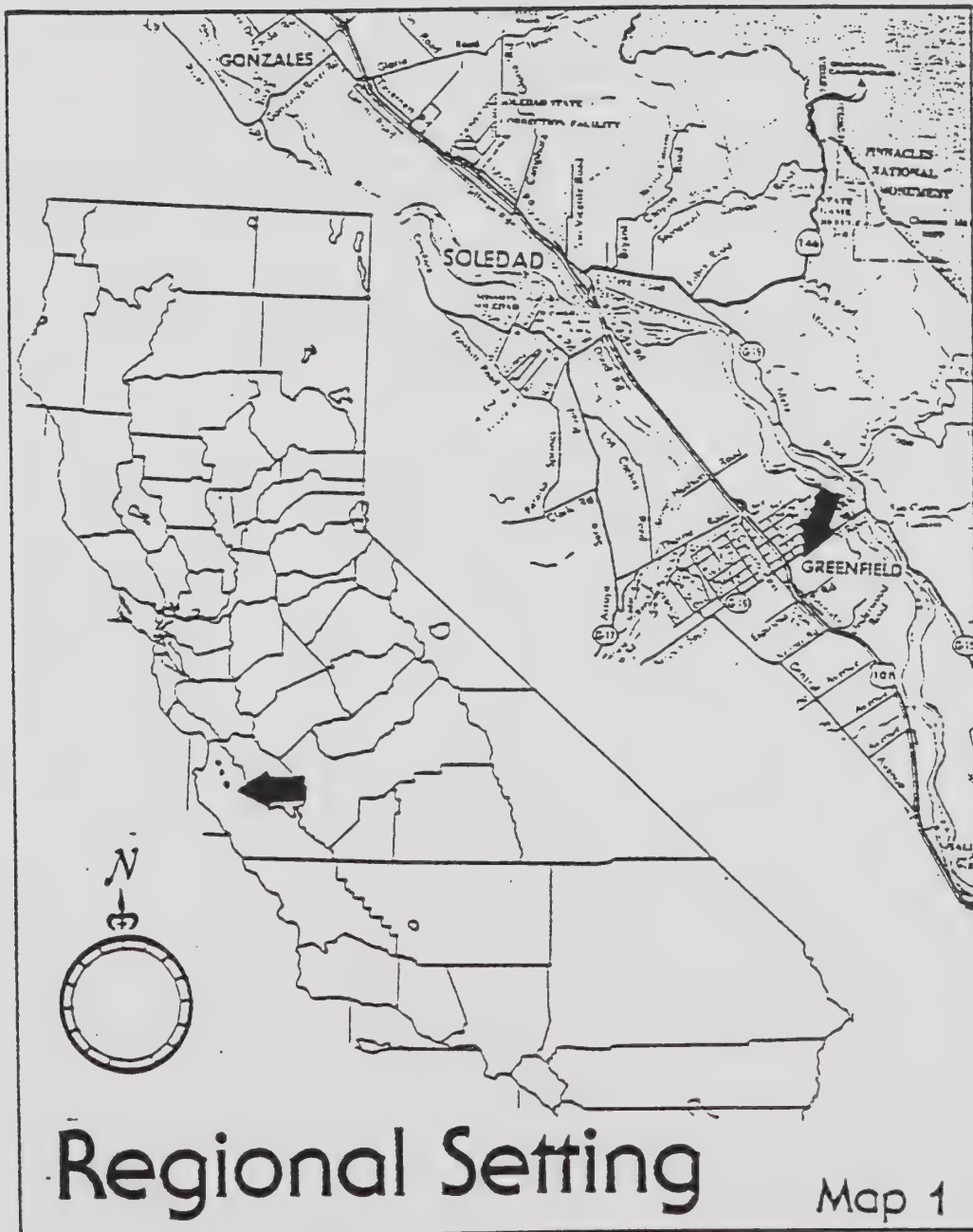
Implementation

This plan, when adopted by the City Council in 1981, becomes official policy and a framework for guiding decisions with regard to both City capital expenditures and private projects. Implementation of this newly revised plan will require, by state law, that the City bring its zoning ordinance into conformance with the Plan.

GREENFIELD PLANNING AREA

Regional Setting

Greenfield is located on U.S. Highway 101 in the heart of the Salinas Valley, approximately midway between King City and the City of Soledad. Thirty-five miles east of the Pacific Ocean, it lies within the Central Salinas Valley in Monterey County. Map 1 illustrates the regional setting of the Greenfield Planning Area.



Planning Area

The City of Greenfield was Incorporated In January 1947 with a population of 1,650 residents. Today the Incorporated City has 4,181 residents and comprises 540 acres of urban land surrounded by agricultural use. The City founders evidently gave some thought to the eventual urban design of the City, because the core of the urbanized City is located on the land considered least "prime" of the surrounding agricultural land. Agriculture historically has been the basic industry of the Central Salinas Valley and Greenfield lies within the richest portion of this agricultural district. The present layout of the City has allowed growth to occur within the city while preserving as much prime agricultural land as possible from encroaching urban uses.

The General Plan is for public and private areas within the City of Greenfield Planning Area. The Planning Area includes land within the incorporated city limits of Greenfield and unincorporated areas surrounding the City. The Planning Area is considered to have a direct impact on the City's development and includes the surrounding lands which are economically and physically related to the City.

The Planning Area for the City of Greenfield is bound to the north by Pine Avenue, to the east by Second Street, and to the west by Thirteenth Street; the extreme southern boundary is formed by the intersection of El Camino Real and U.S. 101.

SUMMARY OF POLICIES AND PROGRAMS

LAND USE

Policy A: Provide guidance for future growth and change in Greenfield, using the policies and programs contained in this General Plan.

Program 1: Use zoning, subdivision and permit review requirements, as well as other devices such as the Capital Improvement Program and Annual City Budget to accommodate planned change and growth.

Program 2: Use the Land Use Plan Map to identify the amount, location, mix, distribution, density and intensity of various land uses.

Program 3: Revise the City's zoning ordinance, text and map, to make them consistent with land use designations.

Program 4: Revise the subdivision ordinance to make the regulation of land divisions consistent with General Plan policies and standards.

Policy B: Favor compact urban growth and phased extension of urban services and discourage urban sprawl or premature development.

Program 5: Adopt annexation policies consistent with the General Plan policies on the timing of growth and established urban service areas. Pursue the adoption of a Sphere of Influence Study for the City of Greenfield consistent with General Plan policies and land use designations.

Program 6: Create urban services areas, designating areas to receive sewer, water and other municipal services over the succeeding 5 to 10 years.

Program 7: Encourage the infilling and intensification of land use consistent with existing neighborhood patterns in the already developed areas of the City currently served by municipal services.

Policy C: Provide and preserve agricultural land and open space around the city to inhibit urban sprawl and maintain the city's identity.

Program 8: Preserve lands designated as "Agricultural" and "Agricultural Reserve" on the Land Use Plan Map in agricultural land use through the year 2000.

Program 9: Encourage the preservation of the agricultural land surrounding the City by coordinating city/county land use policy.

Program 10: Land designated on the Land Use Plan Map as "Residential Reserves" and in agricultural production should not be converted to residential uses until the following findings are made: that development of the land will contribute to the establishment of a stable urban limit; and that 90% of the land designated in the City for residential uses has been developed.

Policy D: Maintain and enhance the existing community character by developing programs which encourage a desirable community character.

Program 11: Maintain the pattern of development within the existing City; and, in undeveloped areas in and outside the City, encourage new development patterns that would allow for a residential mix by type and income.

Program 12: Protect rural views through development regulations, landscape plans and sensitive location of buildings and public facilities.

Program 13: Identify and protect entrances to the city by recognizing and presenting urban/rural transition areas and by landscaping City entrances in a manner that would be attractive to passersby and would not adversely affect the economic development of the area.

Program 14: Develop a design overlay zone which would be used along sensitive areas to implement landscape and setback requirements and architectural review.

Policy E: Provide for needed residential expansion timed to population growth and in areas properly located for projected residential development.

Program 15: Use the Land Use Plan Map of the General Plan as a guide for future residential development.

Program 16: Use specific plans and planned community development regulations to define land use policy and to encourage residential development sensitive to surrounding uses.

Program 17: The scattered siting of mobile homes throughout the City should be discouraged by the zoning ordinance. A combining district including mobile homes may be added to the zoning ordinance, and could be applied to various areas throughout the City which would concentrate mobile-type subdivisions in certain areas, and at the specified density of the areas.

Policy F: Enhance the livability of residential areas through land use regulations and the provision of public facilities and services to meet the needs of each neighborhood area within the City.

Program 18: Provide for adequate park space and facilities in Greenfield to serve the needs of all segments of the community.

Program 19: Acquire parkland space through developer in-lieu fees required from private landowners.

Program 20: Encourage low maintenance type parks and open space.

Program 21: With new development, require developers to share with the community the responsibility of ensuring that adequate public facilities will be provided to serve increased community need.

Program 22: Reduce through traffic on local neighborhood streets and maintain those streets for strictly residential traffic.

Program 23: Provide for neighborhood and convenience stores within easy walking distance of residential areas.

Program 24: Create a neighborhood character in areas to be built with single family dwellings by discouraging any development, other than residential in residential zones.

Program 25: Require on and off site improvements to be completed with construction; such as water, sewer and street development, schools and parks, landscaping, both on site and to local streets, noise attenuation and drainage improvements.

Policy G: Designate land for commercial and industrial uses properly timed and located to provide for projected economic development.

Program 26: Use the Land Use Plan Map of the General Plan as a policy statement on future as well as current commercial and industrial development.

Program 27: Preserve the City's industrial land for future industrial development and actively encourage the addition of industrial enterprises in the Greenfield Planning Area.

Policy H: Encourage the development of complementary commercial and industrial activities that are compatible with the Greenfield area, and that provide jobs.

Program 28: Revise the zoning ordinance to establish industrial zones which designate intensive industrial activity and light research-type industry and revise the zoning map to reflect these designations.

Program 29: Utilize land use regulations and non-constricting design control concepts in light industrial areas, implemented through the development review process.

Program 30: Re-define "professional" in the City's Zoning Ordinance and create a new zoning overlay identified as Professional (P) to provide for this type of use in conjunction with either the residential or commercial sector.

Program 31: Make the distinction in the City's Zoning Ordinance between a strict Light Commercial "C-1" District and Neighborhood Commercial and apply it to those areas deemed appropriate.

Program 32: A zoning overlay should be developed for the commercial area along El Camino Real, encouraging compatible land uses and attractive frontage for these service commercial areas.

Policy I: Encourage the revitalization of the downtown central business area.

Consistency

Program 33: Enhance the City's central business district by concentrating the area in a functional and efficient manner and creating an attractive center for retail services and social activities.

Policy J: Phase the provision of public and quasi public facilities with population growth.

Program 34: Through the City's Five Year Capital Improvement and the Resource Implementation Format, allocate funds for the construction of water, roads and wastewater facilities and improvements, libraries, parks and other City government facilities.

Program 35: Use the adopted Water System Master Plan for the City of Greenfield in any water system improvements.

Program 36: Plan City government offices and facilities expansion, considering General Plan population and land uses.

Policy K: Coordinate with regional, local and private jurisdictions on mutual planning policy.

Program 37: Through active communication with the Greenfield Unified School District, plan cooperatively for the expansion of existing school facilities and the siting of new facilities.

Program 38: Participate in the Association of Monterey Bay Area Governments Planning Programs to ensure coordination of regional and local planning policy.

HOUSING

Policy A: Require that new residential development provide a choice in housing type and density to meet the housing needs of all economic and ethnic segments of the population, including the elderly, low and moderate income families and those employed locally.

Program 1: Use the Land Use Map of the General Plan as policy for existing and future residential development. It indicates housing location, type and minimum/maximum densities.

Program 2: Encourage the production of affordable rental and ownership housing by providing incentives that reduce building costs.

Policy B: Provide for a continually expanding supply of ownership and rental housing in Greenfield for persons of all income and ethnic groups.

Program 3: Consider providing incentives to builders, such as density bonuses or fee waivers, for construction of innovative and affordable housing units.

Program 4: Consider rezonings of older areas within the present city limits to encourage construction of higher density development such as condominiums and attached houses.

Program 5: Consider the allowance of lower cost building types such as modular-type housing through-out low density residential zones as part of the Zoning Ordinance, while permitting mobile homes in areas designated as medium density.

Program 6: Maintain a balance between rental housing opportunities and home ownership by encouraging development of new units and retention of existing units.

Policy C: Enhance the livability of existing residential units by assuring that all housing units provide a healthy and safe environment for their inhabitants.

Program 7: Continue development and refinement of housing rehabilitation programs for low to moderate income home owners with federal, state and bond funds.

Policy D: Provide housing opportunities for all residents of the City, including the disadvantaged, elderly on fixed incomes, handicapped, low and moderate income families and farm workers.

Program 8: Make maximum use of public and private resources to help solve special housing problems.

Program 9: Address special housing needs of the City through the Housing Plan of the General Plan and the Housing and Community Development Housing Assistance Plan.

Program 10: Develop programs to provide a density bonus or other incentive to be granted to developments that include a substantial portion of affordable units to average and below-average income households (especially farm worker households).

Program 11: Evaluate the suitability of vacant parcels close to downtown for the provision of medium density residential development capable of providing housing for elderly and handicapped persons.

Policy E: Regulate the use of land to minimize energy consumption and maximize the efficiency of energy consumed.

Program 12: Undertake programs that emphasize energy retrofiting in existing residential structures via insulation and weatherstripping.

Policy F: Encourage energy production systems and energy conservation programs which would diversify our energy resources and facilitate reduced energy consumption.

Program 13: Promote the use of passive and active solar systems in new and existing residential buildings.

Policy G: Work with other local, state and federal agencies, public utilities, and community organizations to implement energy conservation and longer range renewable energy development programs.

Program 14: Create a City Energy Task to work with other cities to examine the potential benefits of energy incentives in relation to imposed energy regulations, and identify community priorities in energy matters.

CIRCULATION

Policy A: Provide a safe and efficient street system throughout the City.

Program 1: Recognize and maintain the street classification system (as illustrated in the Circulation Plan Map) which identifies functions of different types of streets for future planning, and provide for through traffic on arterial and collector streets.

Program 2: Evaluate street maintenance and improvement programs annually and incorporate needed improvements within a Capital Improvement Plan.

Policy B: Provide safe, adequate access on all roads for vehicles and pedestrians.

Program 3: Acquire rights-of-way to widen Apple Avenue, if feasible.

Program 4: Ensure adequate street widths and street and sidewalk requirements in new developments.

Program 5: Ensure street designs and public improvements that provide adequate pedestrian protection.

Policy C: Ensure provision of adequate parking in downtown and residential neighborhoods.

Program 6: Consider the future development of public parking lot in the downtown area.

Program 7: Review off street parking standards for residential and commercial developments annually to ensure adequate parking provisions.

Policy D: Encourage provision of a mix of transportation systems to meet the needs of all segments of the population.

Program 8: Support County programs that provide transportation services to the elderly and handicapped.

Program 9: Continue to evaluate public surveys of transit needs.

Program 10: Encourage development of bicycle paths in new residential developments.

LAND USE ELEMENT

PURPOSE

The purpose of the Land Use Element is to provide for orderly growth for the City by setting forth general designations for the location, extent and distribution of specified land uses. This element is intended to establish a pattern for land use, set standards for the intensity of development and promote a balanced and functional mix of land uses consistent with community values.

ISSUES

Population Growth

Since 1970, the City of Greenfield has grown from a population of 2,608 to a total of 4,181. This amounts to a 60.03% rate of growth over the ten year period, or an average annual rate of 6%. This figure is compared to the rate of growth for neighboring Salinas Valley cities, Monterey County and the State of California in Table 1.1.

Table 1.1
Population Growth Trends

Area	1970 Population	1980 Population	Change In Number	Change In Percent	Average Annual Growth Rate
Greenfield	2,608	4,181	+1,573	60.0%	6.0%
Gonzales	2,575	2,891	+316	12.1%	1.2%
Soledad	4,222	5,896	+1,679	39.6%	4.0%
Monterey County	247,450	289,252	+41,802	16.8%	1.6%
California	19,975,069	23,510,372	+3,535,303	17.7%	1.7%

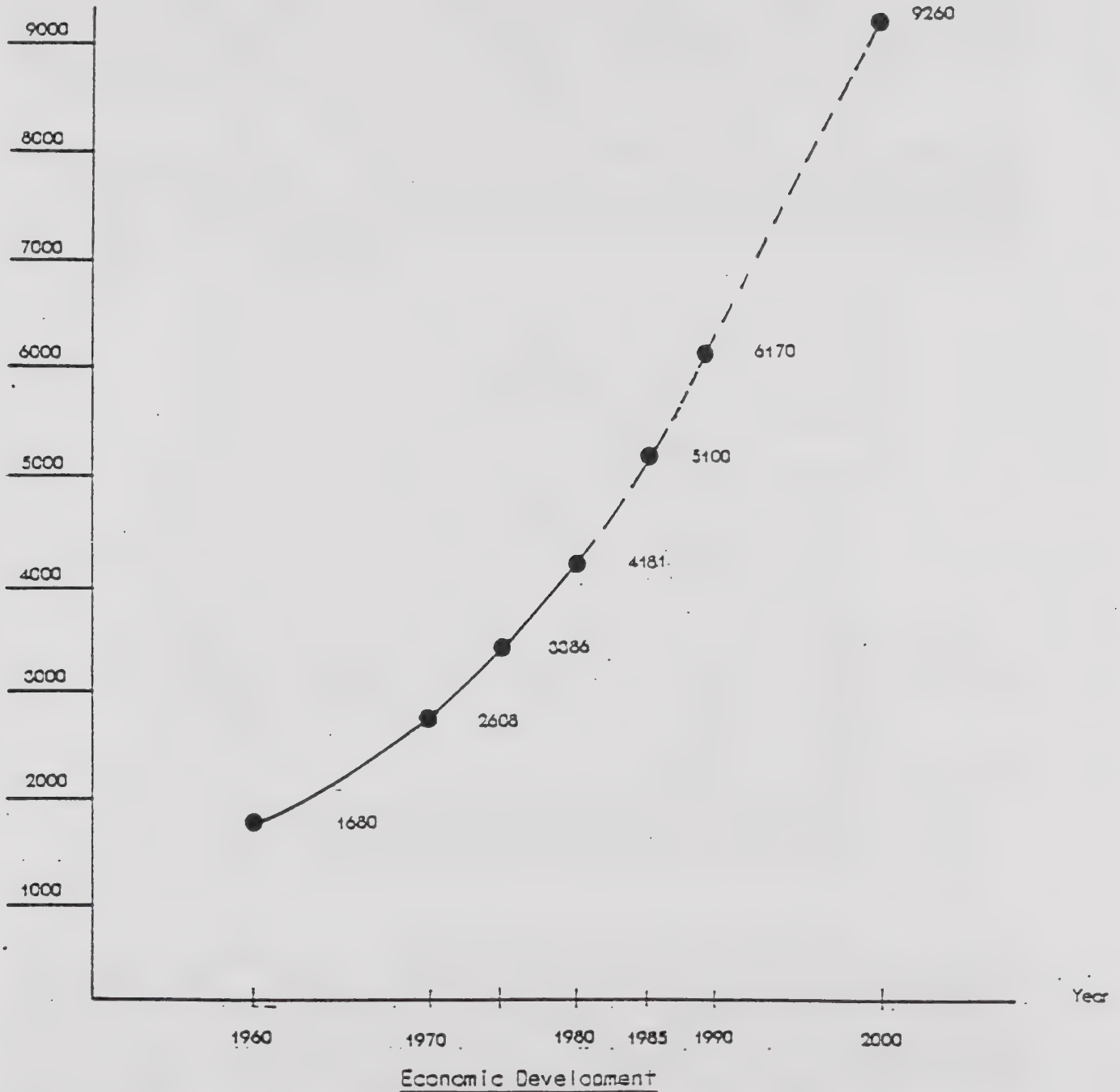
Source: 1970, 1980 U.S. Census

Greenfield has experienced the largest percentage of growth in Monterey County for this time period. In terms of proportion of population, Greenfield is, if not the major growth center of the Central California Coastal Region, certainly among the few communities which have experienced such a population increase.

If Greenfield grows through the 1980s and 1990s with an average rate of growth of 5% per year, the City population would double. This projected growth rate figure is based on recent AMBAG projections through the year 1985 and estimates thereafter. The population growth trends and future projections for the Greenfield area are illustrated in the following graph.

Trends in Population Growth

Persons in Thousands



Future population growth is dependent upon future economic development within the Greenfield area. Population forecasts are based upon past economic development trends in the region and the projected future growth of the region's economic base sectors.

The two major components of the economic base for the Central Salinas Valley are agriculture and manufacturing.

The City is located within the County's major agricultural center of the Salinas Valley. Agriculture represents the major component of Monterey County's economic base, providing jobs both directly and indirectly related to agriculture. Table 1.2 gives a breakdown of the employment sectors in the Greenfield labor market area. (The area includes the Census Tract areas of the cities of Greenfield, Soledad and King City.)

Food processing is the largest employer among all manufacturing industries within Monterey County. Within the manufacturing and wholesale categories are other jobs related to agriculture, such as manufacture of irrigation systems and seed production companies. This further increases the number of jobs that are dependent upon agriculture.

Table 1.2
Employment by Type in Greenfield Labor Market Area

Activity	Number Employed	Percent
Agriculture/Agricultural Services	2,070	34%
Manufacturing	626	10%
Transportation	217	4%
Construction	142	2%
Retail Trade	1,134	19%
Wholesale Trade	309	5%
Finance, Insurance & Real Estate	88	1%
Service	765	13%
Government	729	12%
TOTAL	6,080	100%

Source: Monterey County Transportation Study, 1978

The Central Salinas Valley historically has been characterized by a high unemployment rate, seasonal employment fluctuations, and lack of employment opportunities within the City. According to the Monterey County Transportation Study, the Labor force for the City of Greenfield in 1978 was 1,316 persons out of a population of 3,386. Of those employed, less than half had jobs located within the City limits of Greenfield. The unemployment rate in 1978 was 8.8%.

The City of Greenfield has sought to stimulate new industrial development within the City in an effort to broaden employment opportunities. The City presents several benefits to future industrial development: access to transportation networks, a large unemployed labor force and, to some extent, lower labor costs relative to the general market. Currently, an 11.3 acre industrial park has been approved in the City of Greenfield. Public services are extended to the site, which is available for occupancy.

Commercial development in the form of retail businesses is found in the downtown area and a new shopping center located outside of the downtown central business district. As industrial development occurs, the demand for commercial services also will grow, therefore increasing commercial development as well. As this occurs, use of existing facilities and demand for more shopping facilities will increase.

Because of the economic development efforts of the City of Greenfield, the taxable sales in Greenfield have increased from \$78,000 in the 1978/79 Fiscal Year to \$138,000 in the present 1980/81 Fiscal Year. The total taxable sales per capita rose from \$2,305 in 1978/79 to \$3,584 in 1980/81. This represents a significant growth in economic development for the City.

To determine general trends that economic growth can generate, several projections can be made. Generally, light industry generates 1 job for every 400 to 1,000 square feet of building space. For every job in the industrial sector, 1-1/2 jobs are created within the service sector. Currently there are proposals for industry expansion and development of an industrial park within Greenfield. If this were to occur, approximately 170 industrial jobs could be created, triggering the creation of 255 additional jobs in the service sector. If more industrial development were to occur within Greenfield, the job opportunities would be increased even more.

While these figures are projections only, they illustrate the extent of future economic development will affect the City's population growth. The creation of new jobs will be absorbed to some extent by residents currently within the City and by commuters from other areas in the Salinas Valley.

Future land use and housing matters in Greenfield will be related directly to the City's economic development. The broadening of the City's socio-economic base is dependent upon the orderly growth and expansion of the economic segment of the community.

Existing Land Use

Land in Greenfield is used for housing, commercial and industrial enterprises, public facilities and recreation. The City is centered in the midst of agricultural lands which are bound by the Santa Lucia Range to the west and the Gabilan Range to the east. These features enhance the rural setting of the community and help to shape the City's geographical and practical boundaries.

The activities and land uses existing in Greenfield have evolved over the years into an established pattern. To provide a basis for analyzing current conditions and determining future needs, a survey was made of the pattern of land use within the planning area. The existing land use within the City's planning area is generalized in Map 2. The amount of land for each land use within the City is identified in Table 1.3.

Table 1.3
Land Use Inventory

Use	Amount of Land In Acres	
	1973 ¹	1977 ²
Residential	161.0	165.0
Commercial	11.0	11.0
Industrial	0.0	0.0
Public Utilities	.5	1.0
Institutional	33.0	33.0
Public Facilities	6.0	6.0
Streets/Highways	122.0	122.0
Agriculture	56.0	56.0
Vacant	31.0	27.0
Total	421.0	421.0

¹Source: 1973 General Plan Land Use Element,
Hahn, Wise & Associates.

²Source: Land Use Inventory by the Monterey
County Transportation Study.

The following table shows comparative land use percentages of Greenfield and an average rural city of similar size and character in California.

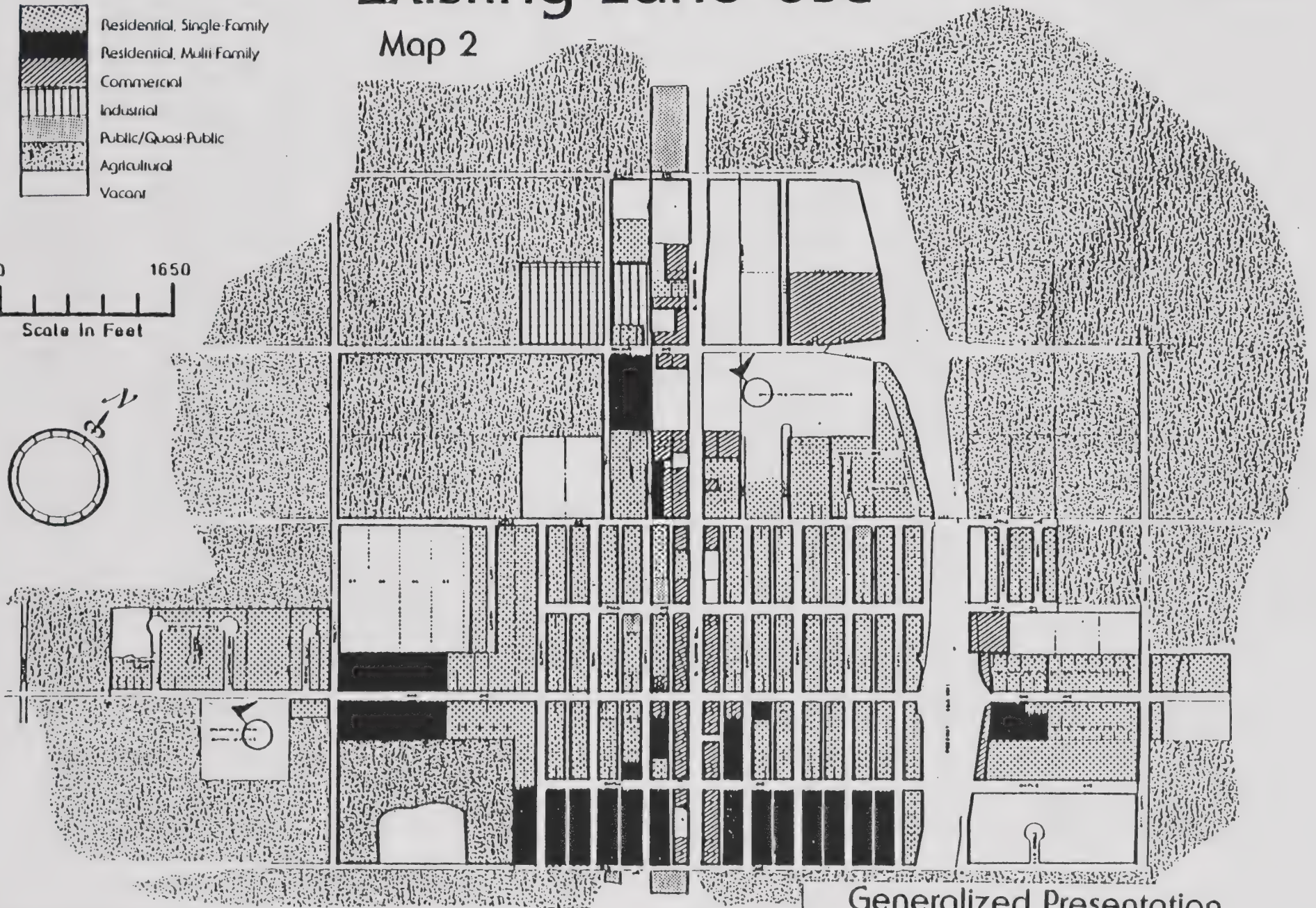
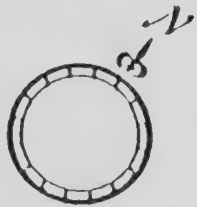
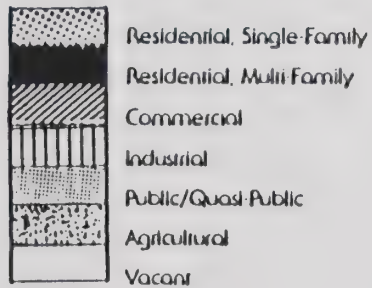
Table 1.4
Comparative Land Uses

Generalized Land Uses	(1980 figures) Greenfield	Average City
Residential (all densities)	41.0%	39.5%
Commercial	5.2%	3.1%
Industrial/Commercial	5.6%	5.6%
Public & Quasi Public	7.6%	18.2%
Streets/Highways/Roads	24.0%	28.3%
Agricultural/Vacant	16.2%	6.3%
	100.0%	100.0%

Existing Land Use

City of Greenfield

Map 2



Generalized Presentation

Public Services

The availability and capacity of public services are closely related to future residential, commercial and industrial development. As services begin to reach their capacities, the City will need to plan for expansion and improvement to keep pace with development. These services consist of storm drainage facilities, sewage treatment, water service, fire and police protection, schools and park and recreational facilities.

A review of existing and future services in the City of Greenfield is necessary in order to plan for future city expansion.

Storm Drain Facilities

A major problem in the City of Greenfield is the lack of storm drainage facilities. Though the City has required percolation ponds for all new developments, the older portions of the City are not serviced by a public facility to drain off storm waters.

The land around Greenfield generally slopes from west to east and thus water generated by storms accumulates and flows in an easterly direction. Areas of Greenfield are subject to these accumulated waters flowing east, particularly along Apple Avenue at Highway 101 and east of Oak Avenue. (Those areas identified by the Federal Insurance Administration as flood hazard zones are illustrated in maps included in Appendix D.)

The problem is severe enough to cause the City to seek and obtain approval to discharge water running into and generated within this area into a State highway percolation pond. The project to route water accumulation in to the State highway percolation pond has not been completed since sufficient funding has not been available from local sources.

Sewage Treatment

Sewage from the Greenfield area is treated by the City of Greenfield waste water treatment facility, located east of the City. The facility is considered a primary treatment plant. The primary facility equals approximately 500,000 gallons per day average flow, adequate for the expected 1990 service area population. The plan is presently running at 265,000 gallons per day. This leaves approximately 235,000 gallons per day for the facility expansion within the Greenfield service area. The City of Greenfield is planning to expand the existing pond capacity from 260,000 to 500,000 gallons per day.

Sewage transport and treatment may pose the strongest limitation to development in the Greenfield area. The City's main Interceptor eventually will need improvement in order to service the population projected for the Planning Area. The improvement and sizing of much of the City's sewer lines will also have to be completed as development occurs. Sewage treatment may be a constraint to future industrial development since the City's sewer pond treatment system cannot accommodate certain types of industrial waste.

Water Service

The City of Greenfield obtains its present water supply from groundwater, through two principle wells. One well is located on Oak Avenue between 11th

and 12th Streets; this is a standby well. The quality of the water obtained from this well is marginal in that it exceeds the recommended concentrations for total dissolved solids, hardness and sodium, as established by the U.S. Public Health Service. However, the concentrations of all constituents measured are below mandatory standards set by the U.S. Public Health Service.

The second and primary well is a result of the West Side Water Project, funded through the Farmers Home Administration. This well is located near Fourteenth Street at the extension of Cherry Street. The West Side Well has a 16-inch transmission line that runs directly to the main 100,000 gallon water tank adjacent to the original, between Eleventh and Twelfth Streets on Oak Avenue. The water capacity presently available for the City of Greenfield is approximately 1.6 million gallons per day. The water quality of the primary well is within the standards set by the U.S. Health Service.

No major service constraint exists in terms of quality of water supply for the Planning Area. However, the present water storage capacity would be inadequate in the case of a large fire or malfunction of existing wells during a high water use period. The City recently adopted a proposed Water Systems Master Plan. The implementation of this Plan would increase the storage capacity from 100,000 gallons to between 1,250,000 and 1,500,000 gallons. There is no funding available for the proposed project at this time, however.

In addition, several areas in the City either are serviced by inadequately sized water lines or will be as development increases. One of the objectives of the Water System Plan is to replace inadequately sized water lines. This is necessary in order to provide water service for anticipated future development.

Fire Protection

Fire protection is provided by a volunteer fire district for the Greenfield area. The district extends from Lagomarsino Avenue to the south, the Salinas River to the east, the Arroyo Seco River to the west, and the U.S. Forest Service fire substation to the north, approximately halfway between Greenfield and Soledad. The district has a mutual aid agreement with the U.S. Forest Service District Office, located in King City, California.

The fire protection service in Greenfield consists of 21 volunteer firepersons, two 1000-gallon pumpers, and one rescue truck with a 300 gallon pump capacity. The station is located near the corner of Oak Avenue and El Camino Real in the City of Greenfield.

Police Protection

Police service is provided by the City of Greenfield from their station located near the corner of Oak Avenue and El Camino Real within the City of Greenfield. The department consists of seven official sworn personnel, including a chief, captain, sergeant-corporal and four officers. The department has four patrol vehicles and includes a canine unit.

As Greenfield expands, services will be required to increase service capabilities to keep pace with expanding development. If a significant amount of development occurs, more fire and police protection will be needed in terms of personnel and equipment.

Schools

The combined capacity of the Greenfield Elementary School and the Oak Avenue School is approximately 1,000, with present highest enrollment at 987. Enrollments fluctuate to a great extent in this district due to migrant worker movements. It appeared enrollments were declining over the past few years; however, at present they seem to be on the upswing. The average daily enrollment for the past school year has been 910 students. The existing school capacity will pose a significant constraint to future development. Additional facilities will be necessary in the very near future.

Parks and Recreational Facilities

There is a lack of adequate parkland space within Greenfield. The City requires new development to dedicate parkland space or pay fees in lieu thereof. However, the current needs of the city are not being met.

GENERAL GOALS

This Land Use Plan is an effort to respond to the projected population growth within the Greenfield Planning Area so that future expansion can occur in an orderly and planned manner. The plan has been developed in accordance with current needs and projected City expansion and is a schematic representation of the objectives and goals of the community.

The foremost goal for the Greenfield Planning Area is that the physical development of the urban area should proceed in an orderly manner, in response to social and economic demands, while conserving the natural resources of the region. The following objectives support this primary goal:

1. To provide a general guide for the orderly future physical development of land uses within the Planning Area.
2. To protect and preserve prime agricultural land from the encroachment of sprawling urban development.
3. To provide the general location and extent of various land uses, including housing, business, industry, agriculture, recreation, education and other public areas.
4. To allow each type of use sufficient area to develop to the fullest extent indicated by the economy and general welfare.
5. To separate incompatible land uses -- the major deterrent to orderly development.
6. To encourage the development of sufficient and proper industry and commerce in the urban area to make the community a relatively self-sufficient economic unit.
7. To provide a comprehensive guide for public improvement, adequate public facilities for present and future residents of the city, and an atmosphere which will stimulate private investment.

8. To conserve the natural resources of the Planning Area.
9. To encourage the development of recreation and parks system designed to serve the needs of all the people of the area.

LAND USE PLAN

Intent of the Plan

The intent of the Land Use Plan is to present policies and programs for the orderly growth and future planning of the Greenfield area. As the City grows and the population increases, it is vital to have a statement of long range city objectives and programs. The plan presents this statement through specific goals, policies and programs dealing with Community Growth and Design, Residential and Economic Development and Public Facilities Management.

Land Use Plan Map

The Land Use Plan Map shows the City's intentions for the development, redevelopment, growth and preservation of public and private properties within the Greenfield Planning Area. The Planning Area includes land within the Greenfield city limits and unincorporated areas surrounding the City.

The Land Use Plan Map shows proposed land uses and streets within the city limits, reflecting existing patterns. This is because land within the city is largely built out and has evolved over the years into an established pattern. It is this pattern, combined with the City's natural setting, that gives Greenfield its rural character. The residents of the City have expressed a desire to retain the community feeling of Greenfield by maintaining the general pattern of activities while providing for orderly growth pursuant to this plan. The Plan Map reflects this objective with current land use patterns acting as a base from which to build the future city.

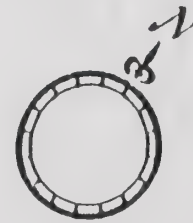
The General Plan Land Use Map is a schematic presentation of mappable city policies and programs that give direction to the use of land in Greenfield. It is a plan drawn to reflect City policies in the areas of housing, transportation, economic opportunity, community design and resource management, and brings together the mappable objectives in regard to these areas. All of the objectives, policies and programs of the General Plan cannot be reflected in the map, however, and are therefore detailed in subsequent sections of this General Plan.

Implementation of the Plan Map

The General Plan, including the Plan Map, will become the foundation to guide Greenfield in land use matters. No subdivision or rezoning will be approved unless it is in harmony with the adopted plan. The zoning map that will be developed as part of the zoning ordinance amendments should conform to the Plan Map. Current zoning for the City of Greenfield is illustrated in Map 3.

LEGEND

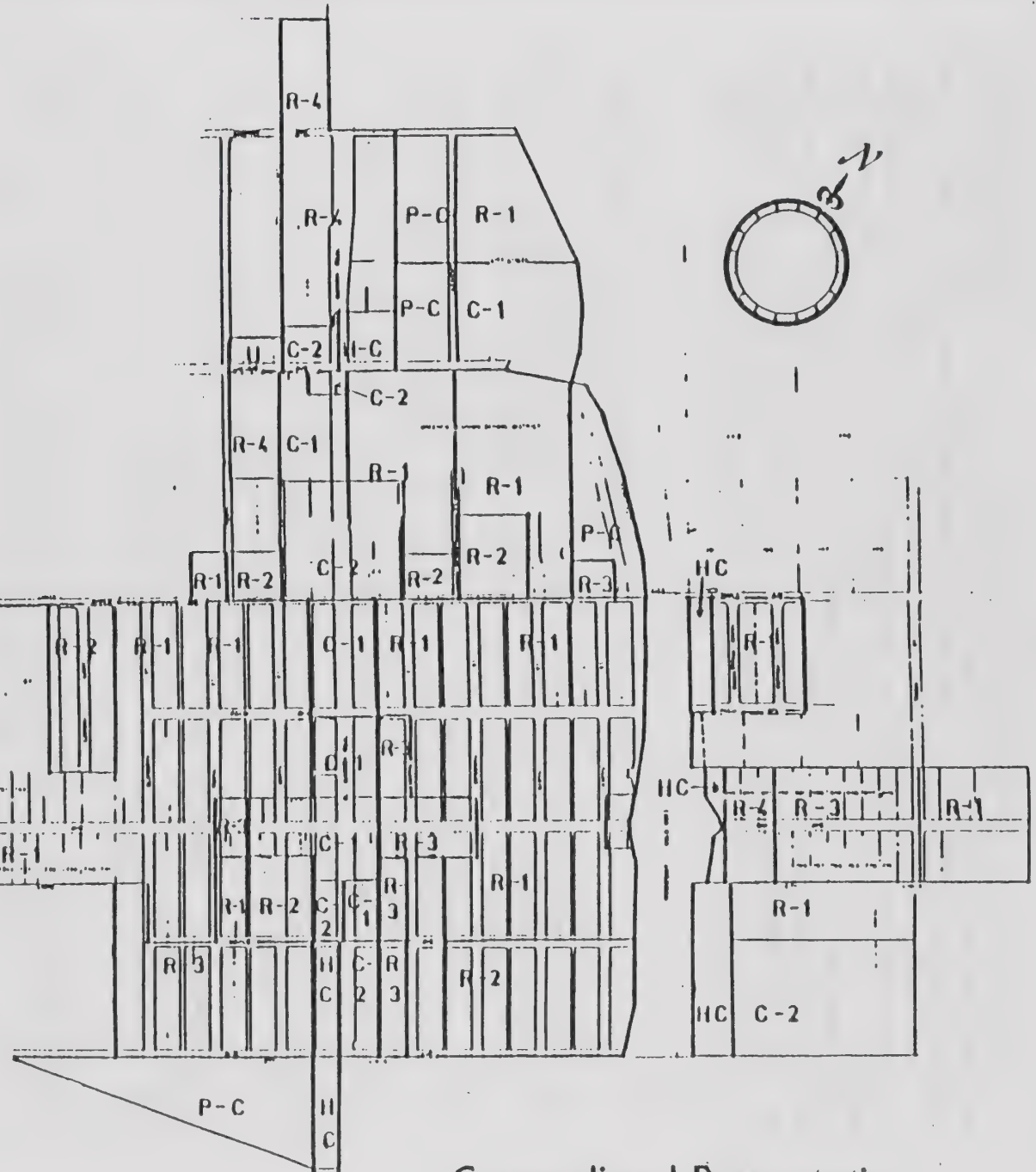
- R-1 Single Family Residential
- R-2 Duplex Residential
- R-3 Multi-Family Residential
- R-4 Residential Professional
- C-1 Retail Commercial
- C-2 General Commercial
- HC Highway Commercial
- P-C Planned Community
- U Unclassified



Existing Zoning

Map 3

City of Greenfield



Generalized Presentation

The specified detailed land use designations in the zoning ordinance are not identified on the plan map; however, land use designations shown on the plan map correspond to established zoning districts. For each land use category designated on the map, at least one zoning district will be implemented. In some areas more than one zoning designation will be used, with what is known as a "combining district". For example, the use of a Design Control (D) District in conjunction with a Light Commercial (C-1) District, or some other designation. The "D" District will not stand on its own because it has no land use designation, whereas the "C-1" District identifies specific land use types for a subject parcel. However, in combination the two districts can introduce regulations not normally applied by just the "C-1" District.

Definitions of Land Use Designations

Low Density Residential: Consists of one residential unit on each lot, with a detached building designed for, or occupied exclusively by, one family. Densities in single family areas will range from 1 to 8 units per gross acre.

Medium Density Residential: Consists of duplexes, multiple dwellings including apartments, condominiums and dwelling groups and mobile home parks.

Dwelling, Multiple: a building or portion thereof, used or designed as a residence for 2 or more families living independently of each other, including apartment houses, apartment hotels and flats, but not including automobile courts.

Dwelling Group: a group of two or more detached or semi-detached one family, two family or multi family dwellings occupying a parcel of land in one ownership and having any yard or court in common.

Densities for the multi family residential land use will vary depending upon such factors as slope, existing services, aesthetic concerns or proximity to a major street. Densities generally will range from 7 to 18 units per acre.

Residential Reserve: Consists of lands that are suitable for residential development only after such time as 90% of other lands designated for residential uses have been developed. The Residential Reserve designation is intended to provide a stable urban boundary by discouraging dense residential development in areas outside the urban city. Densities proposed for this designation are .5 units/acre.

Light Commercial: Consists of uses of a neighborhood or community retail nature such as appliance stores, banks, food stores or other uses not deemed a nuisance to the neighborhood in which they are located.

Retail Commercial: Consists of uses, such as retail stores and shops of a heavy commercial character, that are conducted in a building.

Highway Commercial: Includes facilities that provide city-wide and regional services that rely on customers making trips by automobile and do not necessarily benefit from being located in high volume pedestrian areas. Services include motels and fast-food restaurants or other uses requiring good automobile access and service drives.

Light Industrial: Includes such uses as offices, research, storage facilities, and manufacturing establishments whose operations are clean and quiet and do not conflict with any adjacent residential uses.

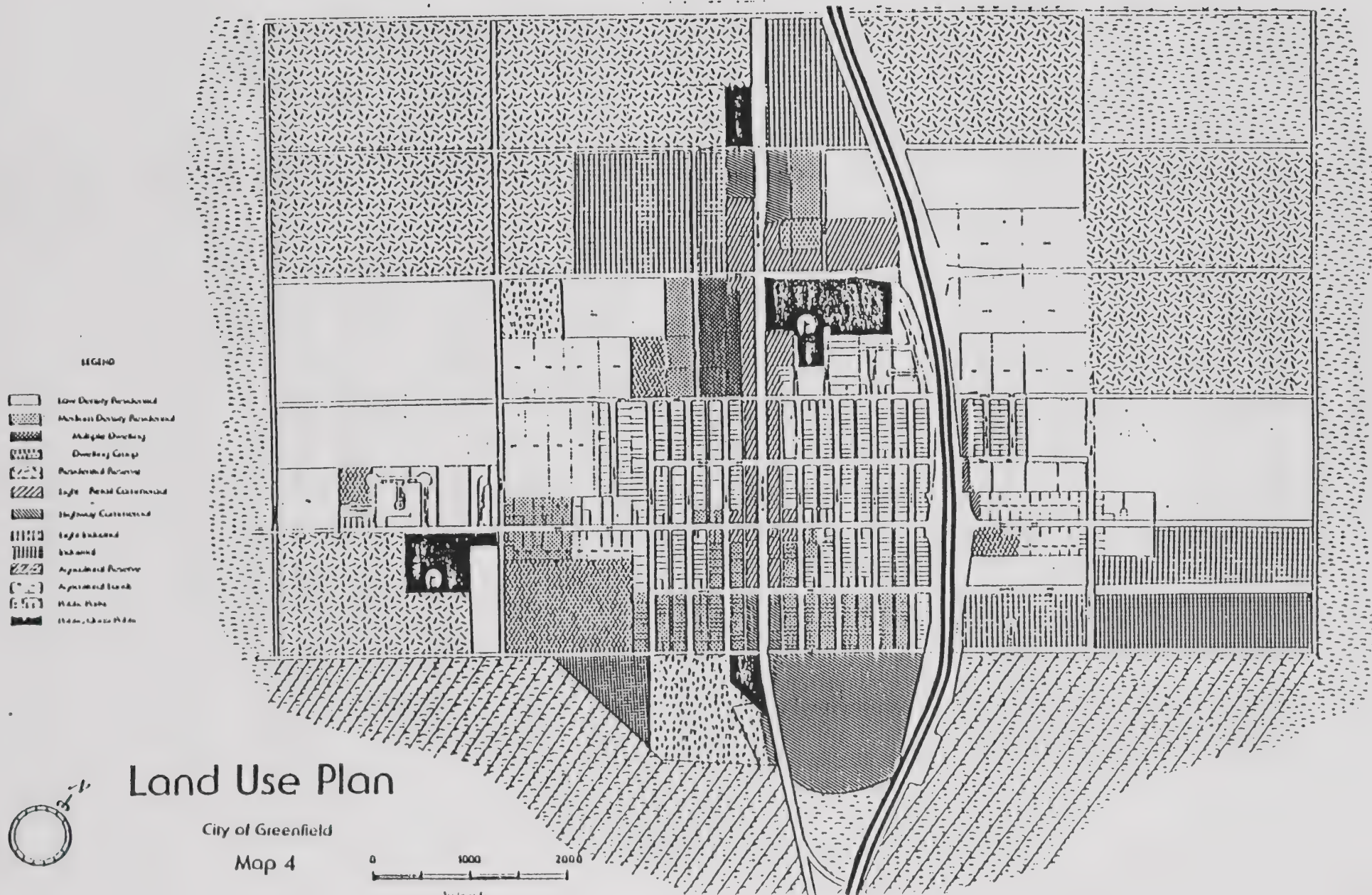
Industrial/Manufacturing: Industrial uses include wholesale facilities and agriculture-related industries and the manufacturing, processing, repairing or packaging of goods.

Agricultural Reserve: Land considered to be of prime agricultural value which should remain in agricultural use throughout the planning period.

Agricultural Lands: Lands currently used for farm or grazing land, located outside of the urban region of the Planning Area.

Public Parks: Open space lands whose primary purpose is the provision of active recreation areas and whose character is essentially urban, with maintained landscaping and facilities.

Public and Quasi Public Facilities: These are specialized public and private buildings and lands.



Plan for Community Growth and Design

Goals

Development in Greenfield has been in response to the needs of the community. Growth has occurred over the years through annexations of unincorporated land surrounding the city, retaining the central city as the core of urban action. It is the goal of the city to maintain the existing community character while providing policies and programs for efficient growth of the city.

Policies and Programs

Community design is a combination of physical features that, together, give each city a character and quality unique to itself. The following policies and programs give direction to the City's goal for community design and growth. They lay out an action program that views the city's natural and community features, as well as future development, within a planning context that reflects the city's desire to preserve its agricultural lands and maintain its character.

Policy A: Provide guidance for future growth and change in Greenfield, using the policies and programs contained in this General Plan.

Since 1970, the City of Greenfield has grown from a population of 2,608 to a total of 4,181. Over a ten year period this amounts to a 60% rate of growth. The rate of growth during the same period for housing units has been calculated at 55%. This housing unit expansion indicates the city's efforts to bring about a reduction of overcrowding. These efforts have resulted in reducing the persons per household from 3.50 to 3.46. If the City is to continue to expand, it is imperative that growth occur in an orderly and planned manner, pursuant to City plans.

Program 1: Use zoning, subdivision and permit review requirements, as well as other devices such as the Capital Improvement Program and Annual City Budget to accommodate planned change and growth.

The Land Use Plan Map also can guide the future development in the Planning Area by indicating land use designations and intensity.

Program 2: Use the Land Use Plan Map to identify the amount, location, mix, distribution, density and intensity of various land uses.

Program 3: Revise the City's zoning ordinance, text and map, to make them consistent with land use designations.

Program 4: Revise the subdivision ordinance to make the regulation of land divisions consistent with General Plan policies and standards.

Programs 2, 3 and 4 coordinate the proposed Land Use Plan with City policies and programs which will aid in the implementation of the goal of planned growth for the City of Greenfield.

Policy 8: Favor compact urban growth and phased extension of urban services and discourage urban sprawl or premature development.

Program 5: Adopt annexation policies consistent with the General Plan policies on the timing of growth and established urban service areas. Pursue the adoption of a Sphere of Influence Study for the City of Greenfield consistent with General Plan policies and land use designations.

Monterey County's Local Agency Formation Commission (LAFCO) is required by the Knox-Nisbet Act, Section 54774 of the California Government Code, to develop and determine the Sphere of Influence of each local governmental agency within the County. The term "sphere of Influence" refers to a plan for the probable ultimate physical boundaries and service area of a local governmental agency within a 20-year time frame. The Commission has adopted guidelines and local policies for developing a Sphere of Influence. Greenfield's adopted policies for the ultimate growth of urban lands are in accordance with these LAFCO guidelines.

The Citizens of Greenfield have proposed a Sphere of Influence boundary for their City that is contiguous to the Planning Area boundaries set forth in this document. In implementing policies and programs of this document, the City is directed to request recognition of the proposed Sphere of Influence Boundary from LAFCO. Recognition of the City's proposed boundaries would come through the completion of Greenfield's Sphere of Influence Study and adoption by the Monterey County LAFCO.

Program 6: Create urban services areas, designating areas to receive sewer, water and other municipal services over the succeeding 5 to 10 years.

Urban Service Areas consist of existing developed and undeveloped land within an agency's Sphere of Influence, which are now served by existing urban facilities, utilities and services or are proposed to be serviced within 5 years. by urban facilities, utilities and services within a 5 year time frame. The urban service area boundaries proposed within this plan correspond to these areas of the Land Use Plan Map within the Planning Area boundaries not designated as "Residential Reserve", "Agricultural Lands" or "Agricultural Reserve". The lands within the proposed urban service boundary are those within the urban limits of the existing city and lands which are either proposed or approved for development and/or service expansion on the urban fringe. These lands encompass an area which is presently being serviced adequately by the City, is planned for service extension within the next 5 years, or is likely to receive services in the near future. The area therefore corresponds to the criteria used by LAFCO in developing urban service limits.

By implementing Programs 5 and 6, the City of Greenfield can facilitate the ultimate adoption of a Sphere of Influence study. These programs encourage coordination in planning efforts between the City of Greenfield and the Monterey County LAFCO and will aid in the logical determination and adoption of a Sphere of Influence boundary and service area boundaries.

Program 7: Encourage the infilling and intensification of land use consistent with existing neighborhood patterns in the already developed areas of the City currently served by municipal services.

This program reflects the philosophy that urban development requires urban services and should logically be within the core of the city. By concentrating urban development within the City, efficient use is made of existing urban and municipal services. Furthermore, the pressure for undesirable urban sprawl and unplanned expansion is reduced, thereby reducing the loss of valuable agricultural lands. This program also reflects the desire of the residents of Greenfield to maintain the existing pattern of development and use it as a base upon which to expand their city.

Policy C: Provide and preserve agricultural land and open space around the city to inhibit urban sprawl and maintain the city's identity.

Policy C is a statement of recognition of the importance of the agricultural land and open space surrounding the city which gives the community its unique rural character. It is a statement of the City's intention to maintain the existing character by preserving the agricultural lands bordering the limits of the Planning Area, while enhancing the existing pattern of development within the City.

This Policy identifies natural features as playing an integral role in the City's future appearance and indicates that the City's developed agricultural resources, particularly the composite small town image they relate, should act as a guide for future development.

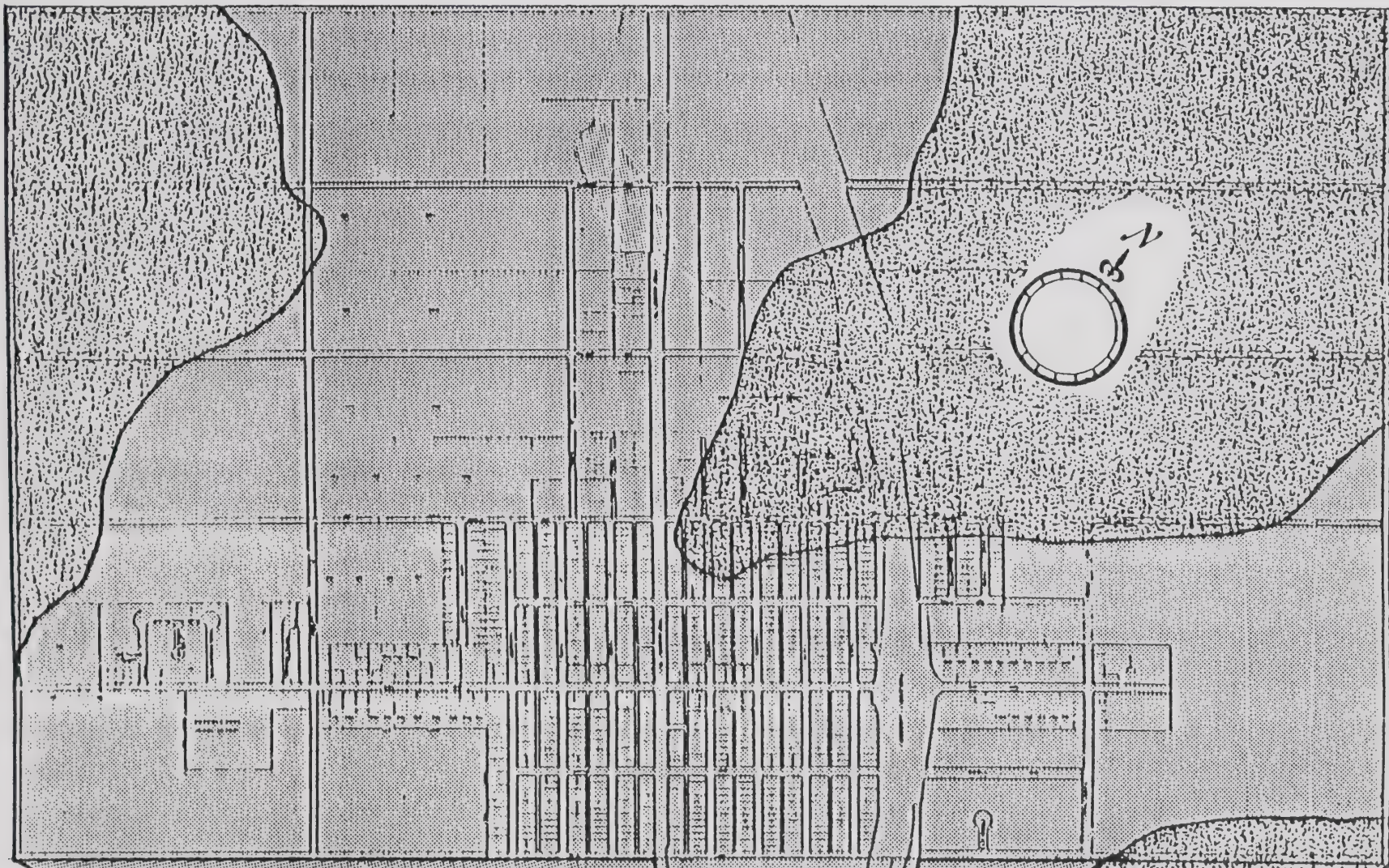
Program 8: Preserve lands designated as "Agricultural" and "Agricultural Reserve" on the Land Use Plan Map in agricultural land use through the year 2000.

Agricultural land and open space have been of prime concern throughout the General Plan process. This program identifies the agricultural land that surrounds the City and calls attention to those lands which are considered unsuitable for development at this time due to their value as agricultural land. These lands are designated on the Land Use Plan Map as "Agricultural Reserve" and are intended to remain in agricultural production. These lands include the fertile lands to the south of the city currently in use as vineyards. Lands designated as "Agricultural" are not likely to be converted to urban uses within the time frame of this document, but in the long term may eventually be converted to other uses.

Program 8 acknowledges the fact that the land one day may be converted to urban uses, but requires that other residential lands in the City be used first. This program is designed to maintain agricultural uses within the time frame of this document and, then, until the land is needed for urban expansion. It also indicates that the conversion of this agricultural land should establish the final City limits, thereby preserving agricultural uses surrounding the ultimate City boundaries.

Program 9: Encourage the preservation of the agricultural land surrounding the City by coordinating city/county land use policy.

Program 9 indicates the City's support for agricultural land uses surrounding the City and a willingness to cooperate with other agencies in achieving this goal. It is also an indication of the City's desire to see agricultural uses maintained, particularly the prime land identified on Map 5 not needed for residential expansion.



Agricultural Lands

Map 5

City of Greenfield

LEGEND



Prime Lands -



Non Prime Lands



re: Soil Conservation Service

Program 10: Land designated on the Land Use Plan Map as "Residential Reserves" and in agricultural production should not be converted to residential uses until the following findings are made: that development of the land will contribute to the establishment of a stable urban limit; and that 90% of the land designated in the City for residential uses has been developed.

The City Planning Area currently contains approximately 700 acres of land in agricultural use. Program 10 calls attention to some of the agricultural lands and the necessity that they remain in agricultural use until such time as demand increases for further City expansion. The agricultural lands, designated as Residential Reserve by the Land Use Plan Map, are those lands currently in productive agricultural use, but which one day may be needed for further residential expansion. This designation recognizes the land development potential of the areas, but also enforces the City goal of an orderly and planned development pattern by not allowing development of these areas to occur until adequate need is demonstrated.

Policy D: Maintain and enhance the existing community character by developing programs which encourage a desirable community character.

Program 11: Maintain the pattern of development within the existing City; and, in undeveloped areas in and outside the City, encourage new development patterns that would allow for a residential mix by type and income.

A concern expressed by the community equal to that for preservation of valuable agricultural lands was for the retention of neighborhood character. For the most part, people like neighborhoods with single family houses and low density development. This program provides direction to retain this low density character in most areas of the City, while providing direction for a compatible mix of housing types and land uses in areas planned for development.

Program 12: Protect rural views through development regulations, landscape plans and sensitive location of buildings and public facilities.

Program 13: Identify and protect entrances to the city by recognizing and presenting urban/rural transition areas and by landscaping City entrances in a manner that would be attractive to passersby and would not adversely affect the economic development of the area.

Programs 12, 13 and 14 apply to entrances to the City along El Camino Real. They recognize the importance of this roadway as a "Gateway to Greenfield". These programs will improve the appearance of the Highway, thereby promoting existing commercial uses and preserving the rural/urban transition area.

Program 14: Develop a design overlay zone which would be used along sensitive areas to implement landscape and setback requirements and architectural review.

Program 14 specifically applies to the proposed scenic highway along Oak Avenue and can be used for this sensitive area. The program is intended to protect the rural character along this roadway while enhancing the general livability of the area.

Plan for Residential Development

Goals

The City of Greenfield desires to provide for needed areas of residential development to meet future projected population expansion. The city wishes to promote the development of residential areas in a manner that will enhance the existing pattern of the city and continue to make Greenfield an attractive place in which to live.

Policy E: Provide for needed residential expansion timed to population growth in areas properly located for projected residential development.

Policy E provides guidance for allocation of vacant land area within the Planning Area boundaries proposed for residential use by the Land Use Plan Map.

Program 15: Use the Land Use Plan Map of the General Plan as a guide for future residential development.

According to the Land Use Plan Map, the location of the future residential development will be on the fringe of the existing urbanized areas of the city to the east and west and to a certain extent to the north. Much of this land, currently within the city limits, has development proposals already under the City's consideration. Infilling of existing vacant land within City limits should be the primary source of future land development. Annexation of land currently in the fringe of the urbanized area of the city is another option.

Currently (1981), the city consists of 540 acres, of which 108.5 acres are vacant. Over 50% of the vacant land is currently proposed or approved for residential development within the City. If this proposed residential development were realized, the City of Greenfield's housing stock would be increased by almost 200 single family units and approximately 120 multi family units. The following table surveys the vacant land within the City, based on zoning.

Table 1.5
Generalized Survey of Vacant Land Within the City of Greenfield

Zoning Designation	Land Use Description	Acres
(R-1)	Single Family	42
(R-2)	Duplex	9
(R-3)	Apartments	4
(R-4)	Apartments/Professional	8.5
(C-1)	Retail Commercial	5
(C-2)	Heavy Commercial	14.5
(H-C)	Highway Commercial	8.5
(P-C)	Planned Community	17
	TOTAL	108.5
Total Land within City of Greenfield		<u>540 acres</u>

Source: City of Greenfield January 1981 figures.

Currently the City's vacant lands have an approximate holding capacity of 600 units, based on existing zoning. This holding capacity represents the use of the land at maximum allowable densities, including consideration for roads and public facilities. (If the current developments proposed were approved at other than the allowable maximum densities, this figure would be altered.)

The holding capacity of the city's vacant lands includes all vacant residential land, underutilized land and some commercial land based on the following breakdown of population percentages for various zoning categories.

Table 1.6 Population Distribution Breakdown by Land Use Zones for the City of Greenfield								
ZONES	R-1	R-2	R-3	R-4	C-1	C-2	H-C	TOTAL
Population	1701	618	598	178	48	150	93	3386
% of Population	50.23%	18.25%	17.66%	5.26%	1.42%	4.43%	2.75%	100%

Source: 1976 Special Census Figures.

If population growth occurs at the historical annual average growth rate for Greenfield (5%), space for approximately 676 units will be needed by the year 1990. The possibility that future population might exceed the holding capacity can be prevented in the years to come through a gradual decrease in growth rate, through the approval of well-designed and substantial housing or selected annexations from the land within the Planning Area boundaries.

The Land Use Plan Map, together with the General Plan Policies, provide guidance for allocation of the vacant land area within the Planning Area boundaries proposed for residential use.

The Land Use Plan Map indicates areas suitable for future residential development, and the desirable intensity of that development based on the provision of adequate housing to meet the needs of the future projected population.

Program 16: Use specific plans and planned community development regulations to define land use policy and to encourage residential development sensitive to surrounding uses.

Specific plans and planned unit development regulations can sensitively and efficiently guide residential development. Such approaches to project review can give the City and developer a unique opportunity to coordinate design guidelines for development while assuring an adequate provision of public services.

Policy F: Enhance the livability of residential areas through land use regulations and the provision of public facilities and services to meet the needs of each neighborhood area within the City.

Policy F is an expression of City intent to maintain the character of the City's neighborhoods and to improve the quality of services to all areas within the City.

Program 17: The scattered siting of mobile homes throughout the City should be discouraged by the zoning ordinance. A combining district including mobile homes may be added to the zoning ordinance, and could be applied to various areas throughout the City, which concentrate mobile-type subdivisions in certain areas, and at the specified density of the areas.

This program encourages mobile-type home subdivisions to be concentrated in designated areas of the City, in keeping with the desire of the residents to maintain the neighborhood character of Greenfield. While the locating of single mobile homes throughout the City should not be forbidden, it is more desirable to concentrate their locations in a subdivision-type pattern, promoting a neighborhood character.

The phasing of public facilities and improvements is the primary public investment influencing the type and character of residential development within the City. The residential environment, being where most people satisfy their basic need for food, shelter and community, is the most important aspect of city life. Therefore the availability of public services and facilities and their adequate timing and phasing provide the basic framework for a high quality of residential life.

The following programs supply the City with clear direction to ensure that adequate public facilities and services will be available to new and existing housing and that a high quality of residential life will be provided in the City of Greenfield.

Program 18: Provide for adequate park space and facilities in Greenfield to serve the needs of all segments of the community.

Existing and proposed parks are illustrated in the Land Use Plan Map. The provision of adequate parkland space in Greenfield has been a prime concern of residents during the General Plan revision process. The Citizens of Greenfield have expressed a desire to see more parks in their area, large enough to serve many segments of the community.

Program 19: Acquire parkland space through developer in-lieu fees required from private landowners.

Program 20: Encourage low maintenance type parks and open space.

Programs 18 and 19 reflect the City's difficulty in the past in funding the acquisition of park space and park improvements. Through these programs, the city's policy of requiring private investors to fund acquisition of park space is reinforced. By encouraging low maintenance park facilities, the problem of unavailability of funding for the necessary improvements is addressed.

Program 21: With new development, require developers to share with the community the responsibility of ensuring that adequate public facilities will be provided to serve increased community need.

Program 22: Reduce through traffic on local neighborhood streets and maintain those streets for strictly residential traffic.

Through traffic on local neighborhood streets is a problem in Greenfield. The grid street can be an efficient traffic design for circulation, but also creates some areas where fast movement of cars is facilitated. This program assures that through traffic is directed to arterial streets.

Program 23: Provide for neighborhood and convenience stores within easy walking distance of residential areas.

Program 24: Create a neighborhood character in areas to be built with single family dwellings by discouraging any development, other than residential in residential zones.

Program 25: Require on and off site improvements to be completed with construction; such as water, sewer and street development, schools and parks, landscaping, both on site and to local streets, noise attenuation and drainage improvements.

Plan for Economic Opportunity

Goals

The economic well being of the City is directly related to city policies regarding local commercial and industrial activity. It is the goal of the City to provide a balanced community, encourage the development of enterprises which strengthen the economic base of the community by providing more job opportunities and increased tax revenues, and locate in areas which are easily accessible and result in minimal disruption to residential areas.

Policy G: Designate land for commercial and industrial uses properly timed and located to provide for projected economic development.

Policy G states that land must be set aside for industrial and commercial uses to be developed when needed and consistent with the City goal of a balanced and economically stable community.

Program 26: Use the Land Use Plan Map of the General Plan as a policy statement on future as well as current commercial and industrial development.

Program 27: Preserve the City's industrial land for future industrial development and actively encourage the addition of industrial enterprises in the Greenfield Planning Area.

Programs 26 and 27 provide for properly timed and located commercial and industrial expansion for the City of Greenfield and require the City to pursue the economic opportunities provided by industrial development. By encouraging such enterprises, the City is actively seeking to broaden its economic base, thereby contributing to the goal of a self-sufficient and thriving community.

Land presently zoned for industrial development is underutilized at this time. The Passek Industrial Park, though approved, is vacant. This land area is an optimal location for industrial expansion due to its location, access and ser-

vice capabilities. The land designated on the Land Use Plan Map for proposed Industrial development, together with the policies and programs of the City, will assure an adequate Industrial land base throughout the planning period.

Policy H: Encourage the development of complementary commercial and industrial activities that are compatible with the Greenfield area, and that provide jobs.

Policy H reflects the City's goal to increase the job opportunities in Greenfield by promoting commercial and industrial development compatible with surrounding uses.

Program 28: Revise the zoning ordinance to establish industrial zones which designate intensive industrial activity and light research-type industry and revise the zoning map to reflect these designations.

Program 29: Utilize land use regulations and non-constricting design control concepts in light industrial areas, implemented through the development review process.

Program 28 is an attempt to concentrate heavier industrial uses away from existing and future residential zones by separating the land use designations. The Land Use Plan Map reflects this Program by locating areas of heavy industrial use south of the existing City. Program 29 provides that existing heavy commercial or industrial use within the City is buffered from surrounding uses by land use regulations.

Program 30: Re-define "professional" in the City's Zoning Ordinance and create a new zoning overlay identified as Professional (P) to provide for this type of use in conjunction with the residential and/or commercial sector.

Program 31: Make the distinction in the City's Zoning Ordinance between a strict Light Commercial "C-1" District and Neighborhood Commercial and apply it to those areas deemed appropriate.

These programs support the mixture of professional buildings and neighborhood serving commercial in or close to the residential sector. Residential/Professional can be a compatible land use for areas next to residential or commercial developments. This program designates land for this use when the need is apparent.

Program 32: A zoning overlay should be developed for the commercial area along El Camino Real, encouraging compatible land uses and attractive frontage for these service commercial areas.

Program 32 is intended to encourage service commercial areas along El Camino Real, while keeping the entrances to the city and central business district attractive to residents and passers-by.

Policy I: Encourage the revitalization of the downtown central business area.

Program 33: Enhance the City's central business district by concentrating the area in a functional and efficient manner and creating an attractive center for retail services and social activities.

Greenfield's downtown business area is located along 3 blocks of El Camino Real, totalling approximately 1950 feet in length, including streets. El Camino Real will remain, in the future, the focal point of the downtown area. This wide arterial has the potential of serving a useful parking and traffic-carrying function while providing open space and aesthetic qualities for the Central Business District, if properly landscaped. Since the elimination of the major through traffic (due to the construction of Freeway U.S. 101), it has become possible to treat El Camino Real as an attractively landscaped esplanade carrying two-way moderate traffic, divided by an abundantly planted median strip which replaces the wide and "vacant" appearance of the street.

As industrial and residential development increases, so will the demand for commercial services, particularly shopping. The provision of adequate commercial space with a commitment to centralize it downtown in an aesthetic manner will work to encourage use by residents, expansion by merchants, and an incentive for industrial development, all contributing to the City's economic base.

Plan for Public Facilities

Goals

The phasing of road improvements and water and sewer extension directly influences and sets the pattern for urban development. It is the intent of the City of Greenfield that public facility improvements be coordinated with growth and development plans and are available at the times and locations needed. All public facilities also should be sensitive to both natural and developed resources.

Policy J: Phase the provision of public and quasi public facilities with population growth.

Program 34: Through the City's Five Year Capital Improvement and the Resource Implementation Format, allocate funds for the construction of water, roads and wastewater facilities and improvements, libraries, parks and other City government facilities.

The above program urges the City to utilize their Capital Improvement Program as an established policy guideline for the provision of community services. The use of the Resource Implementation Format also is supported through this program and, together with the General Plan, should serve as a guideline for future planning efforts and coordination.

Program 35: Use the adopted Water System Master Plan for the City of Greenfield in any water system improvements.

The adopted Water System Master Plan for the City of Greenfield identifies the future improvements needed for the City's water system. This plan has been a useful tool in the development of the General Plan and should continue to serve as the framework for the planning of the city's future water system.

Program 36: Plan City government offices and facilities expansion, considering General Plan population and land uses.

Policy K: Coordinate with regional, local and private jurisdictions on mutual planning policy.

Program 37: Through active communication with the Greenfield Unified School District, plan cooperatively for the expansion of existing school facilities and the siting of new facilities.

Program 38: Participate in the Association of Monterey Bay Area Governments Planning Programs to ensure coordination of regional and local planning policy.

HOUSING ELEMENT

PURPOSE

Each city in California must have a Housing Element in its General Plan, according to State law (Section 65000 et seq). This mandated element consists of an identification and analysis of existing and projected housing needs with a statement of goals, policies, quantified objectives and scheduled programs for the preservation, improvement and development of housing.

This General Plan Housing Element is written to conform to the requirements of AB 2853 (Section 65580 et seq). In adopting AB 2853, the Legislature of the State of California found and declared that:

- a. the availability of housing is of vital statewide importance, and early attainment of decent housing and a suitable living environment for every California family is a priority of the highest order;
- b. the early attainment of this goal requires cooperative participation of government and the private sector in an effort to expand housing opportunities and to accommodate the housing needs of Californians of all economic levels;
- c. the provision of housing affordable to low- and moderate-income households requires the cooperation of all levels of government;
- d. Local and State governments have a responsibility to use the powers vested in them to facilitate the improvement and development of housing to make adequate provision for the housing needs of all economic segments of the community; and
- e. Local and State governments, in carrying out this responsibility, must consider economic, environmental and fiscal factors and community goals set forth in the General Plan and must cooperate with all levels of government in order to adequately address regional housing needs.

HOUSING NEEDS IDENTIFICATION

Housing Characteristics

Existing Dwelling Units

The housing units found in Greenfield are varied according to type and age. The majority of housing consists of single family units, built in past decades, as well as newer subdivisions. Duplexes, triplexes, apartments and mobile home parks also are found. More recently, the City has received applications for construction of condominiums. Table 2.1 identifies the number and type of dwelling units in Greenfield.

Table 2.1 Number and Type of Dwelling Units			
	1970 ¹	1976 ²	1980 ³
Single Family		746	878
Duplex-Fourplex		92	102
Multi Family		102	145
Mobile Home		62	56
Total	746	1,002	1,181

Sources:

¹U.S. Census 1970; number of dwelling units by type not available

²California State Department of Finance, Special Census, 1976

³U.S. Census Estimates, 1980
City of Greenfield (from Building Permit Data, 1980)

The predominant housing type is the single family unit, which comprises 75% of the City's total housing stock, or 878 units.

Between January 1976 and 1980, the City of Greenfield experienced a 15% increase in total housing units. This housing unit expansion indicates the City's efforts to bring about a reduction in overcrowding. These efforts have resulted in reducing the persons per household as indicated in the following table:

Table 2.2 Population and Housing Stock Growth			
	Population	Housing Stock	Average Persons per Household
1970 ¹	2,608	746	3.50
1976 ²	3,386	1,002	3.55
1980 ³	4,181	1,226	3.47

Sources: ¹U.S. Census, 1970.

²California State Department of Finance, Special Census, 1976.

³U.S. Census Estimates, 1980, preliminary.

Household Size

The average household size has decreased between 1970 and 1980, from 3.50 to 3.47 persons per household. This is a result of the increase in the number of dwelling units in the Greenfield area corresponding to the population increase. The average number of persons per household in Greenfield is considerably higher than the average household size for Monterey County, however, which is 2.8. For the entire Monterey region, which includes Santa Cruz County, the average household size is 2.7.

Housing Tenure

Owner occupied housing comprises 55% of the City's total housing stock, while renters occupy 35% of the total dwelling units. Table 2.3 presents figures on housing tenure.

Table 2.3
Housing Tenure -- Renters and Owners

Length of Tenure	Renter	Owner	No Response
0 - 1 year	149	53	
1 - 3 years	87	100	
4 - 9 years	63	159	
10 - 19 years	26	108	
20 or more years	8	101	
Totals	333	521	93
Total Percent	35%	55%	10%

Source: California Department of Finance, Special Census, 1976

According to Table 2.3, of the total 521 owner-occupied structures, 40% (209) have been occupied by their owners for more than 10 years. Of those 209, 101 (48%) have been occupied for more than 20 years. On the other hand, 90% (299) of the rental units have been occupied for less than 10 years and 71% (236) have been occupied for less than 3 years. This illustrates a trend toward increased demand for rental housing in recent years.

Housing Values and Rents

The cost of sound housing and the price of land have been increasing rapidly over the past few years. Inflation and the present high cost of borrowing money have drastically increased the purchase price of standard dwellings.

In Greenfield, housing values have increased at rapid rates. Between 1970 and 1980 the median price for a single family dwelling increased from \$15,700 to \$60,000-\$70,000, or by about 314%. Yet, during that same time period, annual median incomes increased only by an estimated 96%.

The growth of housing costs has been similar throughout the state. The growth of income has not kept pace with the rising housing costs for the average Californian. Growth of median income in Greenfield, being substantially lower than that of the state as a whole, compounds the problem of high and rapidly increasing purchase prices. This problem effectively shuts out many families from the existing market for sound housing.

The costs of rents have also increased during this time period, indicating that a similar situation exists in the rental sector of the housing market. The median monthly rent in 1970 was approximately \$106, compared to an estimated \$200 in 1980. This constitutes almost a 90% increase in rents. A reduction in rental residential construction activity has resulted in demand which is substantially greater than available supply of most single family and multiple family dwellings. This situation has caused rents to increase at a very rapid rate.

Both rental and ownership housing are in short supply due to several internal and external forces. Internal forces include an inability to provide market-rate housing, since the level of housing affordability is much higher than current income levels permit. Thus, demand for housing in the \$60,000-\$70,000 range is extremely limited. Other internal forces include a low vacancy rate, large household size, local regulations, and the deteriorating conditions of a percentage of the housing stock.

External forces include the national, state and regional economic situation, including high inflation and interest rates. As a result, the cost of land and materials has increased rapidly.

Vacancy Rate

The Federal Department of Housing and Urban Development defines a "tight" housing market or "shortage" of housing as an overall rental vacancy of 3%. In 1970, Greenfield had a vacancy rate of 3.2%. The U.S. Department of the Census in a preliminary survey, indicates that the 1980 vacancy rate for Greenfield is 5.2%. According to these figures, there isn't a critical housing shortage in Greenfield (using Federal standards). However, estimates made by the City indicate that there is an approximate 1-2% vacancy rate, thus representing a tight housing supply because fewer units are available.

Housing Conditions

In 1970 approximately 9% of the total housing was rated as seriously needing repairs (those termed "conservation questionable" and "substandard"). Of the remaining dwelling units, 11% were considered to be in need of some repair, and 80% were found to be in good condition. As Table 2.4 illustrates, 1980 estimates identify 20% of the housing units in Greenfield as needing repair.

The City has administered a housing rehabilitation program which provides low interest loans for the rehabilitation of owner-occupied homes and also for rental units (providing the rented housing is in the low- and moderate-income range). The program was initiated in 1977 and financed through federal assistance. To date, no loans have been provided through this program for the rehabilitation of housing.

Table 2.4
Housing Conditions: 1970 - 1980

	1970 ^a		1980 ^b	
	Number	Percentage	Number	Percentage
Standard	609	80	986	85
Conservation Feasible	84	11	151	13
Conservation Questionable	30	4	23	2
Substandard	38	5	35	3
Total Units Surveyed	761	100%	1,160	100%

Source: ^a1971 Greenfield Housing Element

^b1980 Estimates

Several older houses are zoned for a higher residential density, and probably will be allowed to deteriorate until such time that they will be replaced with higher density development. Another reason for deteriorating housing is the cost of repairs. In many instances, home owners on fixed incomes have found it difficult to repair deficiencies. For others, dual ownership of dwellings with family members has prevented low-income residents from receiving federal housing rehabilitation grants.

Many factors should be considered as important indicators for predicting future housing quality. These include original quality of construction, level of anticipated maintenance, ownership vs. rentership, and number of occupants.

Population Characteristics

Population Composition and Employment

Population in Greenfield has increased from 2,608 in 1970 to 3,386 in 1976. This represented a 30% increase, or an approximate annual growth rate of 5%. Employment within the City increased by 25% during the same period. This can be attributed primarily to an increase in agriculture-related business serving the surrounding agricultural area. In comparison, housing increased by 34% over the same 6 year period. Table 2.5 identifies trends in population, employment and housing.

Table 2.5
Population, Employment and Housing

	1970	1976	1970-1976 Change	
Population	2,608	3,386	+778	30%
Employment	326	409	+83	25%
Housing	746	1,002	+256	34%

Source: U.S. 1970 Census,
California 1976 Special Census

The median age in 1976 was 21. This is approximately the same as in 1970. During this time period, median age generally has remained the same. Age distribution is reflected in Table 2.6.

Table 2.6
Age Distribution

	1970		1976	
	#	%	#	%
0- 9 years of age	586	22.3%	656	19.3
10-19 years of age	634	24.3	831	25.5
20-64 years of age	1,200	46.1	1,658	48.1
65 & up	192	7.4	241	7.1

Source: 1976 Mid-Decade Census

The 1976 Census also revealed that approximately 50% of the total population of Greenfield was Mexican-American; 44% of the population was white, and the remaining 6% was composed of other ethnic groups. Provisional data from the 1980 U.S. Census indicates that the population of Spanish heritage within Greenfield is approximately 66%.

Median Income

Median family incomes in Greenfield traditionally have been lower than those of the County. Table 2.7 compares the median income of Greenfield and Monterey County.

Table 2.7
Relative Incomes — Greenfield and Monterey County

Year	Median Income		% of County's Median Income
	Greenfield	Monterey County	
1970	\$ 6,100	\$ 9,730	62%
1976	9,060	11,855	76%
1980		18,400	

1970: U.S. Census
1976: Mid-Decade Census
1980: AMBAG Figures

In 1976, approximately 42% of Greenfield's households (543) were below the City's median income of \$9,060, whereas approximately 51% (399) were below the County's median income of \$11,855. It should be noted that 26% of the households surveyed didn't respond to this question. Income level is the determining factor in housing affordability. Table 2.8 presents housing affordability ranges for low income households as projected by AMBAG. As can be seen, projected affordable sales costs are far below current market prices, and rents are nearly the same as current market rents.

Table 2.8
Housing Affordability

Maximum Income* (80% of Median Range)	Affordable Rental Range Including Utilities	Affordable Sales Price Range
1970: \$0-\$7,784	\$0-\$162	\$0-\$19,460
1976: \$0-\$9,484	\$0-\$198	\$0-\$23,710
1980: \$0-\$14,720	\$0-\$307	\$0-\$36,800
1985: \$0-\$18,188	\$0-\$380	\$0-\$45,470

*For all households between 0% and 80% of County Median.

Source: AMBAG, Housing Needs Report, February 1981.

Appropriate Share of Regional Housing Needs

In compliance with Government Code, Section 65584, "each council of government shall determine the existing and projected housing need for its region." The Association of Monterey Bay Area Governments (AMBAG) has determined, based on the required criteria, an appropriate share of regional low- and moderate-income housing for the City of Greenfield.

AMBAG based its projections upon Monterey County's Economic Base Study and determined that low income households are those that have less than 80% of the County's median income. This amounts to \$14,720 (80% of \$18,400). Furthermore, AMBAG projected that by 1995 40% of all households will have less than 80% of the median income, therefore being considered low income. It is this 40% figure that AMBAG used to allocate regional housing needs. In doing so, two assumptions were made:

- a. No single jurisdiction should expect to accommodate more or less than the regional amount of 40% of low income housing; and
- b. No radical change in employment mix will occur.

According to Section 6588-3b, the Housing Element Should be revised not less than once every five years, including AMBAG's regional projections. Table 2.8 outlines Greenfield's appropriate share of low income housing using the data, criteria and assumptions previously mentioned.

Table 2.9
Greenfield's Appropriate Share

	1976 Base ^a	1985 Projection ^b	Increase Over A Nine Year Period to 1985	Percent Increase
Overall Population	3,386	5,100	1,714	5.6%
Group Quarter Population	0	10	10	100%
Household Population	3,386	5,090	1,704	50.3%
Average household Size	3.55	3.3	-.25	-7.0%
Number of Households	955	1,542	587	61.4%
Low Income Households i.e., 40% of all households	601	617	16	2.6%

Annual Average Increase in Households = 50
from 1976 to 1985

Annual Average Increase in Lower Income Households = (2)
from 1976 to 1985
(Lower Income Households = 40% of all Households)

^aNote that in 1976, 63% of all households in Greenfield were low income.

^bAppropriate share of 1,542 (40%) = 617

Source: AMBAG, Housing Needs Report, Feb. 1981

Based on the figures in Table 2.9, in the 1976 Base Year, Greenfield had more than its appropriate share of the regional low income housing needs (63%). AMBAG's projection stipulated that, by 1985, Greenfield's appropriate share would be 16 households more than the 1976 figure. This would require that, annually for the next ten years, an average of 1.6 homes affordable to those within the low-to-moderate income range be provided within the City of Greenfield. The following section discussed how Greenfield will meet this anticipated need.

Special Housing Needs

The growth of low and moderate income households mentioned earlier is a result of two phenomena that are occurring in the Southern Salinas Valley Region regarding the change in the nature of agriculture. This industry, as a result of unionization, now provides more stable employment and higher wages than in the recent past. The result is a reduction of migratory patterns to where farm workers are stabilizing themselves in areas that offer a more regular income. Another result is that the farm workers have started to vacate labor camps to set up households within the cities.

The most significant special housing need in Greenfield is that of the farm worker. Farm workers have a difficult time finding and affording housing, due to a combination of limited English skills, large family size, and low household incomes, all of which make it difficult to secure loans. Compounding the problem is the fact that many units once meant for seasonal occupancy by single men are now used year-round by laborers and their families. Another problem is overcrowding, a fairly condition common among farm-worker households. More than 30% of these type households contain more than 5 people in Monterey County as a whole. According to the 1976 Census, agricultural workers reportedly were found in 388 households, or in 41% of Greenfield's total households in 1976.

Statistics from the 1975 California EDD Survey found that 98% of all farm workers cannot afford market rate housing, and 77% can't even afford subsidized housing. According to the 1976 Census, 64% of Greenfield's households were below the County's medium income level of \$11,855. People earning \$11,855 annually could, at that time, afford a dwelling unit that cost \$23,710. Unfortunately, housing costs were significantly higher.

There are other special housing needs within the City. These primarily are related to affordability, especially for elderly citizens and low income persons. The cost of housing eventually causes fixed income seniors (and lower income people in general) to have severe financial problems due to overpayment for housing. Over a period of years, migration patterns change in response to changes in housing costs and low income people move out of the area or double-up, creating overcrowded conditions.

Table 2.10 shows the number of building permits issued in Greenfield for construction of Farmers Home Administration 502 homes for the year 1977 to 1980. These numbers illustrate one of the methods utilized by the City of Greenfield to meet its low-income housing needs.

Table 2.10
FHA 502 Home Construction: 1977-1980

1977	7
1978	63
1979	0
1980	5
	<hr/>
TOTAL	75

Source: City of Greenfield Building Permits

Historically, the average annual provision of low income housing by the FHA program in Greenfield has exceeded the projected housing need appropriate share identified by AMBAG. It is anticipated that the future provision of low income homes through this method will correspond to the historic rate. However, it should be pointed out that development of low income homes often is dependent upon many factors, many of which are not within the power of the City to control. For example, the City cannot predict funding levels nor can it forecast the placement of low income homes within its boundaries. This factor is illustrated in Table 2.10 by the difference in number of homes constructed each year.

Most of the housing need met in the City has been that of large families. Most recently, 59 FMHA 502 single family units were occupied and 4 CHFA home loans have been used. Both programs are directed to the provision of housing opportunity to large families that are of low and moderate income. The city actively pursued participation in the CHFA program. The City supported the 502 subdivision by major waterline improvements and major street improvements.

Presently there are 137 units in Greenfield that are occupied under the FMHA 502 program. These 502s represent 15.7% of the city's single family dwellings.

As housing costs rise, those people with the least ability to pay are hardest hit. Senior citizens are forced to go without basic necessities in order to afford the increasing cost of housing. There currently is an approved Housing Authority program which will provide 50 units in Greenfield to serve the need of the Senior Citizens. The Housing Authority current owns the 98 acre parcel south of Elm Avenue between Eleventh and Twelfth Streets, where the units are to be constructed. The construction is to commence in 1981 and will provide 50 apartment type units for the elderly and handicapped. This program alone, which is funded by H.U.D., will more than fill the need projected by AMBAG for low income housing within Greenfield.

Future Considerations

Housing Unit Projections

Assuming population grows at an average annual rate of 5%, it is estimated that 676 additional housing units will be needed by 1990. (This also assumes an average household population of 3.30.)

In Table 2.11, a formula developed by AMBAG to determine the number of new units that are needed in any locality is applied to Greenfield.

Table 2.11
Estimate of Net Increase in Housing Units

	<u>1980 - 1990</u>
1. Allow 1 housing unit for each new household formed	623
2. Allow 5 units per 100 new additions as a vacancy factor to promote mobility and freedom of choice	30
3. Net Increase	653
4. Allow for replacement of housing lost to fire and/or demolition at an annual rate of 1.8% of existing stock in 1976	23
5. Total new construction needs	676

Source: Formula from AMBAG, Housing Needs, 1981.

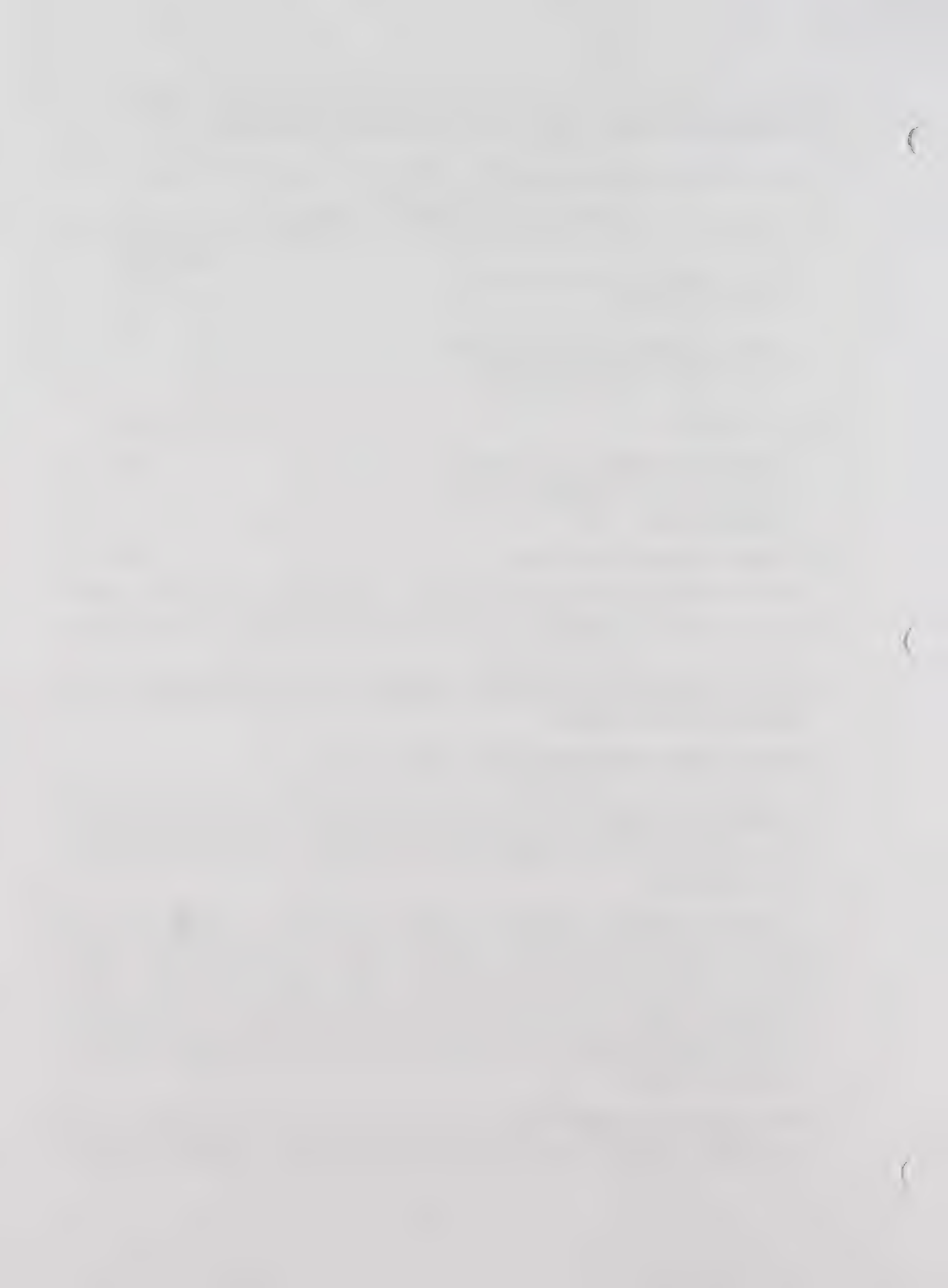
The proposed residential land uses are identified on the Land Use Plan Map. This area planned for residential development should accommodate housing needs through the planning period.

Government and Non-Government Building Constraints

To a certain extent, government regulations can constrain future residential development by imposing limits on residential density through zoning designations. While zoning regulations may serve to restrict development somewhat, the City does not have a growth control ordinance or other regulations that limit development.

It should be noted that development upon the agricultural land that surrounds the City is subject to regional governmental approval. The Local Agency Formation Commission (LAFCO) of Monterey County has ultimate power in the approval/ denial of annexations upon the surrounding agricultural lands. LAFCO is charged with ensuring that growth occurs within the cities and their spheres of influence in an orderly and planned manner, assuring the protection of prime agricultural land. LAFCO also is charged with assigning a sphere of influence to the City of Greenfield. There is no adopted sphere of influence at the present time.

There are more non-governmental constraints that restrict the housing market. As previously discussed, housing costs have increased significantly in the past decade, making it almost impossible for the average worker in Greenfield



to purchase a home. Increasing land costs and progressively higher interest rates have limited residents' ability to purchase and have affected the construction industry, thereby further tightening the housing market.

Alternative methods of financing residential development are available. One such method is Farmers Home Administration (FHA). This type of financing is available within rural areas possessing a need for low income housing. According to the Monterey County Farmers Home Administration, the following criteria must be met to obtain FHA financing:

- a. Adjusted annual income levels must be between \$11,200 and \$15,600. An adjusted gross income equals the gross family income minus 5% and minus \$300 for each child under 18 years of age.
- b. The housing must be of the "no-frills" sort. Amenities such as fireplaces and dishwashers are not permitted.
- c. The average three bedroom dwelling has 1,150 square feet of living area.
- d. No interim financing for the developer is available during construction.
- e. Interest rates for FHA loans are 13.0%.
- f. Approval must be obtained by a state architect, engineer, inspector and local supervisor before financing for the development can be secured.

A problem with this type of financing, as well as other financing sources, is the strict eligibility criteria.

Other limitations to future residential development include infrastructure and environmental constraints. Increased residential growth will place additional demands upon water, sewage and other public facilities and services in Greenfield.

The major environmental constraint is that Greenfield is located in an area of high susceptibility to earthquakes. Future developments must be designed to withstand seismic impacts.

Energy Conservation

The California Energy Commission's 1979 Biennial Report states that the CEC intends ultimately to develop building standards that would "reduce the electricity and gas now used in typical new buildings by at least 80 percent for new buildings constructed after 1990." According to the report, new residential buildings can be designed and built which save 80% or more energy and still meet the current building standards. Such residences currently are being built and marketed successfully by innovative builders throughout the state. The CEC has estimated that, when using marginal costs, building standards designed to save 80% or more of current energy may not only be technically feasible, but also immediately cost effective. The CEC currently is analyzing building standards in order to recommend energy conserving standards that will be cost effective.

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HOUSING PLAN

Principal Goal

The function of this housing plan is to provide decent housing and a suitable living environment for the entire community.

The principal goal for Greenfield is to provide quality residential life by maintaining and improving existing housing stock and by providing expanded housing opportunities for its residents and future populations, leading to a healthy, safe, affordable and efficient living environment for Greenfield as a whole. This goal paves the way for a clear housing policy to ensure that new housing is the type needed, that it is properly located and timed, and that public facilities and services are available. This goal also seeks to meet special housing needs of the community, rehabilitate deficient structures and encourage energy conservation in new housing.

Plan for Residential Opportunities

Housing is a major concern for those who live and work in Greenfield. The plan for residential opportunities focuses upon three housing concerns: new residential development, housing and neighborhood quality, and Greenfield's special housing needs.

Policies A and B deal with new residential development and opportunities, calling for a means to provide ownership and rental housing in accordance with need. Policy C deals with Housing and Neighborhood Quality. Policy D deals with special housing needs for Greenfield. Policies E, F, G, H and I deal with Energy Conservation.

Residential Opportunities and Development

Policy A: Require that new residential development provide a choice in housing type and density to meet the housing needs of all economic and ethnic segments of the population, including the elderly, low and moderate income families and those employed locally.

The location of future residential development will be within and adjacent to the existing city limits. This includes all vacant residential and underutilized land within City limits, as well as future expansion areas.

Program 1: Use the Land Use Plan Map of the General Plan as policy for existing and future residential development. It indicates housing location, type and minimum/maximum densities.

The Land Use Plan Map should guide future housing developments during the next 10 years. Housing needs, availability of urban services, and environmental resources are considered in designating land uses. Specific locations for single family homes and multiple family dwellings are designated on the Land Use Plan map.

Program 2: Encourage the production of affordable rental and ownership housing by providing incentives that reduce building costs.

This program's objectives can be accomplished by:

1. Increasing densities within the Zoning Ordinance to conform to the Land Use Plan;
2. encouraging no frills and self-help housing through zoning and financial assistance;
3. encouraging and supporting the use of density bonuses; and
4. providing incentives such as fee waivers to builders of moderate income type housing, pursuant to State law.

Policy B: Provide for a continually expanding supply of ownership and rental housing in Greenfield for persons of all income and ethnic groups.

In order for this policy to be successful, the City should promote the development of future housing to be built for the rental supply (in accordance with recent trends in Greenfield).

Program 3: Maintain a balance between rental housing opportunities and home ownership by encouraging development of new units and retention of existing units.

Program 4: Consider rezonings of older areas within the present city limits to encourage construction of higher density development such as condominiums and attached houses.

Program 5: Consider the allowance of lower cost building types such as modular-type housing through-out low density residential zones as part of the Zoning Ordinance, while permitting mobile homes in areas designated as medium density.

The purpose of Programs 4 and 5 is to make land available for future housing by increasing densities. When given several housing options, upwards of 75% of all households say they prefer single family home ownership status. But as rising costs outrun increases in family income, it becomes more important to consider second preference in housing (i.e., mobile homes, condominiums and attached dwellings).

Program 6: Consider providing incentives to builders, such as density bonuses or fee waivers, for construction of innovative and affordable housing units.

Housing Conditions and Neighborhood Quality

Policy C: Enhance the livability of existing residential units by assuring that all housing units provide a healthy and safe environment for their inhabitants.

Many Greenfield home owners have occupied their homes for long periods of time and have experienced problems in preventing physical deterioration of their homes brought on by age. Many renters also experience similar problems when landowners do not have the money to rehabilitate their units.

Program 7: Continue development and refinement of housing rehabilitation programs for low to moderate income home owners with federal, state and bond funds.

This program has been successful in California for many years. Federal, state and bond funds programs should be implemented in Greenfield. These programs should be expanded to meet specific needs of the City of Greenfield.

Special Housing Needs

Policy D: Provide housing opportunities for all residents of the City, including the disadvantaged, elderly on fixed incomes, handicapped, low and moderate income families and farm workers.

Program 8: Make maximum use of public and private resources to help solve special housing problems.

Program 9: Address special housing needs of the City through the Housing Plan of the General Plan and the Housing and Community Development Housing Assistance Plan.

Programs 8 and 9 identify two planning tools which can lead to housing programs that address special housing needs. The Housing Plan provides an opportunity to develop program ideas into specific housing programs that work in Greenfield. Housing and Community Development Assistance programs are supported with federal funds to provide for City housing and public facility improvement programs that will benefit low and moderate income families.

Program 10: Encourage programs that provide incentives to be granted to developments that include a substantial portion of affordable units to average and below-average income households (especially farm worker households) .

Program 10 reflects the City's desire to encourage and assist in the provision of affordable units to low income households. By providing incentives, the availability of affordable units will be promoted, thereby meeting the needs of the community. The specific needs of the community and the projected needs, as identified by AMBAG, will be met by the proposed Housing Authority Project to be developed south of Elm Avenue in the City of Greenfield. This project will provide 50 units of low income housing to the elderly and handicapped, and is promoted through the implementation of Program 10.

Program 11: Evaluate the suitability of vacant parcels close to downtown for the provision of medium density residential development capable of providing housing for elderly and handicapped persons.

Program 11 suggests that lands capable of medium density residential projects, close to shopping, might be lands appropriate for fixed income households. Evaluation of such lands for such projects is called for in Program 11 and encouraged in Program 10.

Energy Conservation

This portion of the Housing Plan intends to involve the City in the promotion of energy conservation. This Plan is intended to provide a local context regarding energy issues and opportunities which will serve as the basis for developing a policy position on energy and energy conservation in housing.

The objective of this plan is to reduce energy consumption while obtaining the maximum efficiency of the energy used.

Policy E: Regulate the use of land to minimize energy consumption and maximize the efficiency of energy consumed.

Program 12: Undertake programs emphasizing energy retrofitting in existing residential structures via insulation and weatherstripping.

Retrofitting of existing residential buildings with insulation and energy conserving devices may be the most cost effective measure to reduce energy consumption. The effectiveness of these programs can be promoted by working with utilities that offer free energy audits. California cities have found that "weatherization" of all existing residences would pay for itself within 5 years. An ordinance to require an energy audit at the time of a home sale should be adopted.

Policy F: Encourage energy production systems and conservation programs that diversify energy resources and facilitate reduced energy consumption.

This policy urges the City to shift to utilization of a greater share of renewable sources of energy, in an effort to reverse the historic trend of increasing per capita consumption of energy. The policy also encourages the instigation of energy conservation programs and improved energy efficiency.

Program 13: Promote the use of passive and active solar systems in new and existing residential buildings.

Through the City's Development Review Phase of a proposed project, the use of solar energy systems should be encouraged where appropriate. Designs that take advantage of optimum lot and building orientation will become increasingly cost effective as energy prices continue to rise.

Policy G: Work with other local, state and federal agencies, public utilities, and community organizations to implement energy conservation and longer range renewable energy development programs.

Energy programs are of regional as well as local concern. The City should work with other cities, AMBAG, County of Monterey and other agencies to develop an integrated energy plan.

Program 14: Create a City Energy Task Force to work with other cities to examine the potential benefits of energy incentives in relation to imposed energy conservation programs and identify community priorities in energy matters.

A City Energy Task Force, developed to work with other cities and the County's Energy Task Force, should be responsible for fully developing energy programs, promoting public awareness and seeking funds for energy programs.

CIRCULATION ELEMENT

PURPOSE

A Circulation Element to the General Plan has been required by State law since 1955. The element consists of the general location and extent of existing and proposed major roads, transportation routes, terminals and other local public utilities and facilities.

The purpose of the Circulation Element is to provide an efficient and safe transport system for all segments of the population as well as for commercial goods; make efficient use of existing transportation facilities; coordinate the circulation system with planned land uses; and protect environmental quality while promoting the sound use of natural resources.

ISSUES

Greenfield is linked to other cities in the Salinas Valley by U.S. Highway 101, which runs north-south and bisects the City to the east. A business loop route of 101 runs through the City on the west and provides a route for trucks and vehicles transporting goods. Streets within the City serve local residents.

Other than automotive circulation, there are no other transportation facilities existing within the City of Greenfield. However, the City has put together a means of public transportation through the acquisition of an automobile, which is utilized as a taxi service. This service has been in operation since June 4, 1979.

Other modes of transportation exist in the Greenfield area. The City of Greenfield is served by regular Greyhound Bus Service. Air service for passengers and freight is available at Monterey Peninsula Airport, 58 miles northwest of Greenfield, and Salinas Municipal Airport, 37 miles northwest. Passenger Railroad Service is available in Salinas. The Southern Pacific Railroad Freight Service passes approximately two miles outside the City. There is no present plan to develop facilities for exclusive service in the Greenfield Area. Because the existing rail facilities are located but a short distance away (7 miles) in Soledad and King City, the feasibility of such a project is quite doubtful.

Street Classification Systems

The present street system in Greenfield can be classified in terms of its arterial, collector and local streets. These classifications are used to describe different levels of use, since all streets are not intended for the same intensity of use.

Freeway 101 bypasses the major portion of the City, including the business area; it is designed to carry four lanes of moving traffic with a wide median strip reserved for landscaping. One major interchange is located at the intersection of the Freeway and Oak Avenue, insuring a principle connection with the City and local road system. In addition, a limited interchange is

located at the intersection of the Freeway and Walnut Avenue. The funds currently are unavailable to fully develop this access. Two other major interchanges are located at both extremities of El Camino Real.

Arterial streets are major streets that move traffic to and from freeways and other major streets, and that have controlled intersections. The City's 1973 General Plan identified arterial streets in Greenfield as El Camino Real (Old Highway 101) and Elm Avenue.

Collector streets handle a medium amount of traffic and serve to move traffic from local residential streets to arterial streets. The 1973 General Plan identified the existing streets used as collectors as: Walnut Avenue, Apple Avenue, Oak Avenue, Third Street, Fifth Street, Eleventh Street, and Twelfth Street.

All remaining streets are considered local. These streets provide direct access to residences and properties and are designed to discourage through traffic.

Roadway Capacities

Road capacities are developed to insure that traffic flow generated by future development can be handled by existing streets. Traffic counts are compared to road capacity figures to determine what roads are reaching their traffic flow volumes. Practical road capacities are presented in Table 3.1.

Table 3.1
Practical Roadway Capacities in Greenfield

Roadway Type	Total Vehicles in Both Directions	
	Peak Hour	24 Hours
4-Lane Divided Arterial 84 ft. right-of-way minimum	2,500-2,700	25,000-27,000
2-Lane Collector 60 ft. right-of-way minimum	1,700-2,200	17,000-22,000
Minor Street (2 Lane) 54 ft. right-of-way	900-1,250	9,000-12,500

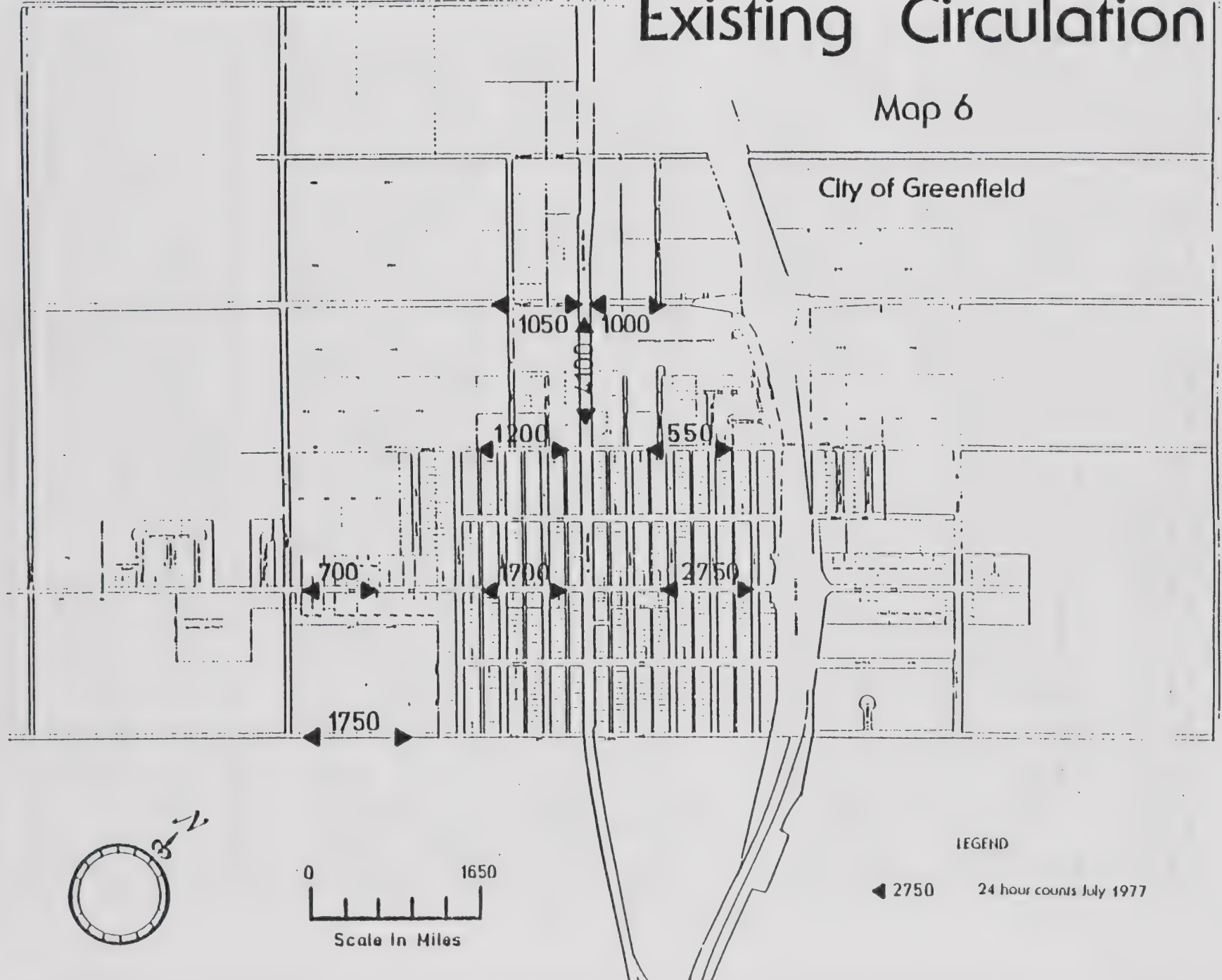
Traffic counts taken in 1977 for Greenfield are illustrated in Map 6.

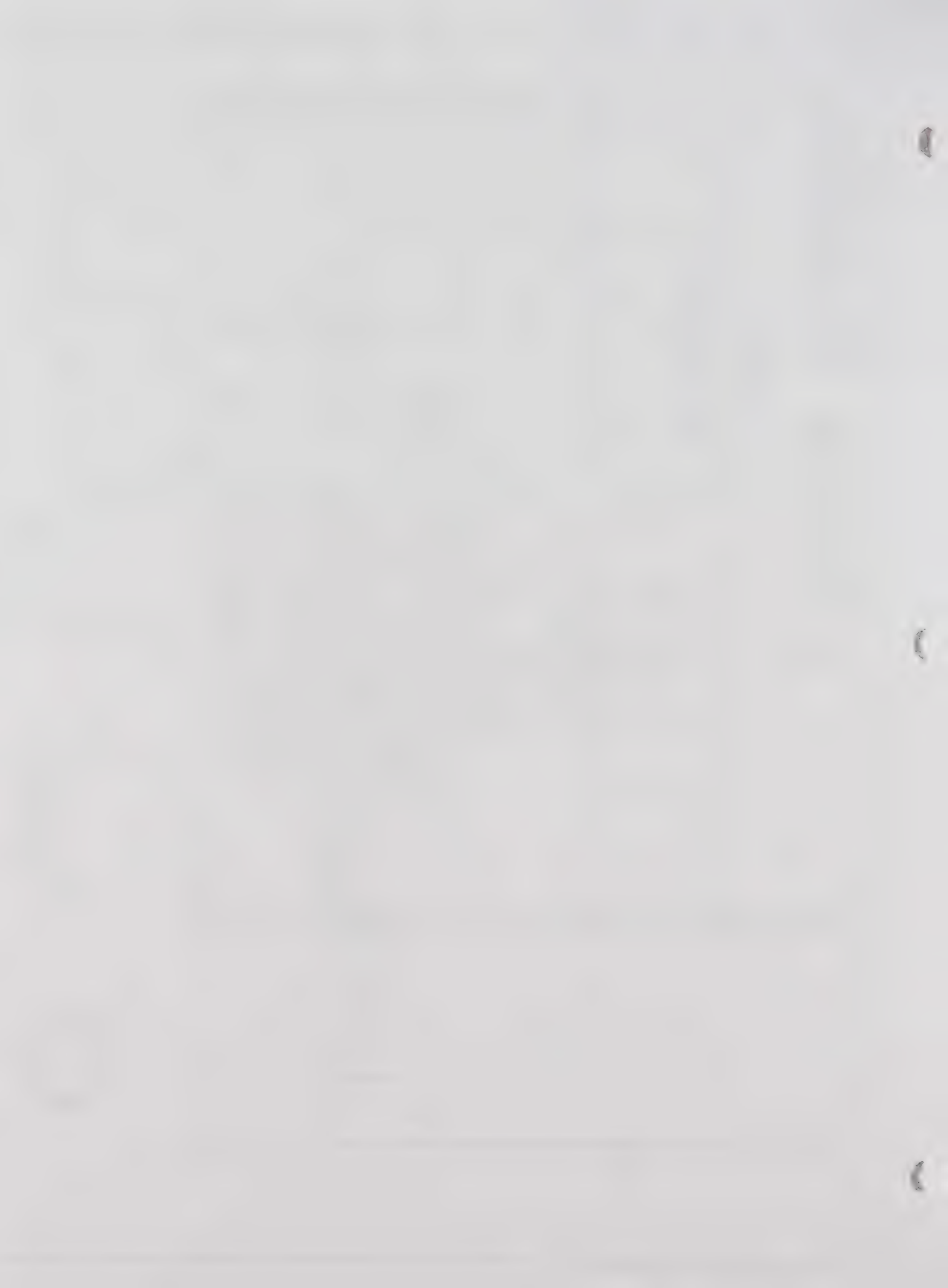
The street classification system is dependent not only on daily traffic volume carried, but also on the function of the roadway, proposed or existing, in relation to the present and anticipated land uses. It is anticipated that

Existing Circulation

Map 6

City of Greenfield





traffic will increase at an average of about 5% each year over the next 20 year period. The widths of some of the streets and highways within the area will have to be increased in order to accommodate the anticipated traffic volume.

It should be noted that the City of Greenfield recently has adopted standard details for local street capacities. Standard streets within the city now must correspond to the requirements and details as adopted. Whether the existing and future streets will be adequate to accommodate the anticipated future traffic flow depends on the street improvements and safety facilities to be constructed. However, capacities are also a function of street amenities such as parking, stop signs, pedestrians (or anything that may impede traffic), and number of households.

The major traffic problems in Greenfield are through traffic on local streets, restricted access for emergency vehicles on narrow streets and pedestrian safety. Streets in residential areas that are often lined with parked cars make it difficult for emergency vehicles to gain access. The high traffic volume on Walnut Avenue, in close proximity to an elementary school, also presents a hazardous situation.

Parking

Parking in residential areas is sometimes a problem for residents due to the high number of vehicles in some areas. City standards for off-street residential parking are 2 spaces per unit for single family dwellings and multiple units with more than 2 bedrooms; 1-1/2 spaces per unit are required for duplexes and multiple units with one or two bedrooms. Although these standards are considered adequate, the large number of parked vehicles in certain areas of the city can cause a problem for emergency access and circulation.

According to the 1976 Census, 81% of all households had one or more vehicles, while 10% reported none. Approximately 1,346 total vehicles were found in Greenfield at this time. Although figures for actual vehicle registration within the City are not available, the 1976 figures indicate that there are approximately .40 vehicles per person, or 1.4 per household. Table 3.2 identifies total vehicle registration in Monterey County as a whole, which shows a per capita vehicle ownership of 1.5 per person. It also demonstrates a slowing trend in vehicle ownership, which has increased about only half as much between 1970 and 1980 as it did between 1960 and 1970.

Table 3.2
Monterey County Motor Vehicle Registration

	1960	1970	% Change	1980	% Change
Autos	71,200	109,415	34	136,170	19
Total Vehicles	92,320	151,447	39	197,442	23

Source: California Department of Motor Vehicles.

Public Transportation

Public transportation in Greenfield currently is provided by Greyhound Bus Service and the Rural Health Project. Greyhound runs buses three times a day to Salinas and to other south County cities.

The Rural Health Project provides intercity transportation in South County for medical appointments for the elderly, the handicapped and qualified low income persons. It also provides some service to the elderly for shopping. Table 3.3 identifies weekly passenger trips for these groups of people within South County. "Disadvantaged" persons utilize 58% of those using the supplied service, and elderly comprise 35% of those using the service. There are no scheduled routes, and service is provided with 24 hour notice.

Table 3.3
Number of Passenger Trips Per Week Provided to
Elderly, Handicapped and Disadvantaged Individuals
in South Monterey County, by Type of Organization, June 1979

	Elderly 60+	Handi- capped Adults	Handi- capped, Youths ¹	Disadvan- taged	Totals	% Dist. of Total Trips
Public & Private Human Serv. Orgs.	242	38	-0-	305	585	
Community Services Department (CSD)*	7	24	-0-	186	217	
Greenfield Transit	15	-0-	-0-	-0-	15	
King City Transit	31	-0-	-0-	-0-	31	
SUBTOTAL	295	62	-0-	491	848	4.0

¹All Handicapped Youths are carried by School Transit District Vehicles.

²Disadvantaged refers to persons who are economically disadvantaged, including clients of special need programs such as Alcohol and Drug Rehabilitation, Troubled Youths, Day Care Centers, Crisis Counselling.

*No longer in existence.

Source: Monterey County Transportation Study, July 1979

In the past, it has been indicated that a regular low cost schedule is needed between Greenfield and Salinas, particularly for senior citizens. In 1978 a transit survey indicated that the majority of those surveyed did feel a public transportation system was needed. For those who did express an interest in public transportation, the primary desired destination was Salinas, and the main reasons were for shopping and medical appointments.

Increased public transportation for commuting employees may be necessary in the future. As fuel costs increase and industrial projects are developed within South County, public transportation for commuting employees may become a desirable alternative to the automobile.

Scenic Highways

Related to the Circulation Element is the Scenic Highways Element of the General Plan. This element seeks to protect scenic routes and their viewshed corridors. In the past, Oak Avenue and Arroyo Seco Road have been proposed as scenic roads. Normal use of land in scenic corridors is permitted, but generally design standards are developed to protect the scenic route from unsightly features. These standards may include landscaping and locating transmission lines underground.

An important mode of transportation which often is neglected but serves an increasingly large section of the population is that of bicycling. The bicycle element of the Regional Transportation Plan identifies existing and proposed bike routes within the City of Greenfield. No physically improved bike routes presently exist within the City of Greenfield; however, there are numerous approved and suggested bike routes. Currently, the City of Greenfield is participating in a pavement marker program through which bicycle lanes will be designated along El Camino Real from Walnut to Apple Avenue. Oak Avenue has been identified for bike route status and is so posted. This demonstration relates to the proposed scenic highway identified for this stretch of road.

PLAN FOR CIRCULATION

Goals

It is the goal of the City of Greenfield to provide an efficient, safe and economical pattern of streets for residential, commercial and industrial uses. It is recognized that such a system will influence the pattern of future development, and therefore must be coordinated with land use policy.

The City also seeks to provide other means of public transit and facilities to meet community needs as they arise. Taken together, these goals reflect the City's commitment to enhancing the quality of life in Greenfield.

Policies and Programs

The intent of the Circulation Element is to present policies and programs for future transportation planning. As the City's population grows, the number of vehicles will increase. It therefore becomes necessary to implement function-

al programs that maintain a balanced street system with adequate parking and improvements to provide for the projected vehicle increase. It also is necessary to develop public transit programs to accommodate future community needs.

The following policies are designed to create a transportation system to respond to the needs of all residents of Greenfield. Policy A provides programs for an overall street circulation system for Greenfield. Policies B and C address existing circulation problems within the City. Policy D encourages development of a mix of transportation systems.

Policy A: Provide a safe and efficient street system throughout the City.

Future land use planning should consider the development of a street system that facilitates traffic flow, avoids traffic congestion and provides adequate road safety measures.

Program 1: Recognize and maintain the street classification system (as illustrated in the Circulation Plan, Map 7), which identifies functions of different types of streets for future planning, and provides for through traffic on arterial and collector streets.

This system of identifying arterial and collector streets provides a basis for future planning of major access streets to facilitate traffic flow throughout the City and to avoid high traffic volumes in residential neighborhoods.

Program 2: Evaluate street maintenance and improvement programs annually and incorporate needed improvements within a Capital Improvement Plan.

This program is intended to ensure that street improvements keep pace with future traffic flows. In order to do this, road capacities should be evaluated during the environmental review process of future proposed residential and industrial developments. In this manner, traffic flows can be monitored, and road improvements can be planned for.

Policy B: Provide safe, adequate access on all roads for vehicles and pedestrians.

Narrow streets and alleys present problems for fire engines that must move down these streets in the event of an emergency. Often the streets are lined with parked cars on both sides. These streets were constructed prior to upgraded regulations that specify street widths.

Program 3: Acquire rights-of-way to widen Apple Avenue, if feasible.

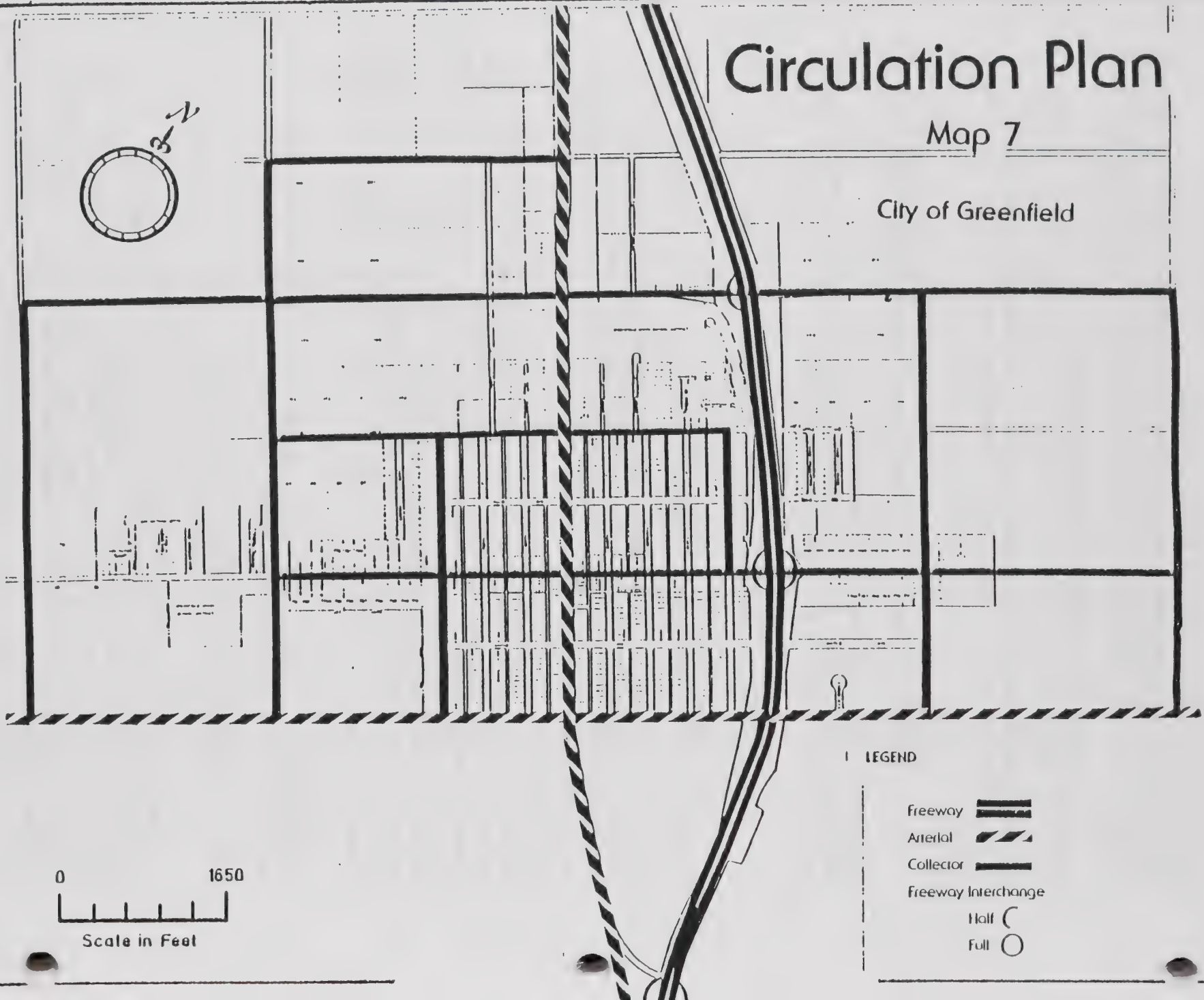
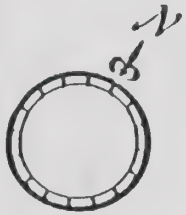
Apple Avenue appears to be the most narrow and problematic for emergency vehicle access and efficient traffic flow. Since many lots on this street have been developed, it may not be possible to develop a right-of-way acquisition program. If feasible, however, right-of-way acquisition should be considered for this roadway, where access and circulation pose a problem. Additional development planned along this roadway will further compound the hazardous situation.

Program 4: Ensure adequate street widths and circulation patterns in new developments and enforce street and sidewalk requirements.

Circulation Plan

Map 7

City of Greenfield



0 1650
Scale in Feet

LEGEND

- Freeway
- Arterial
- Collector
- Freeway Interchange
 - Half
 - Full

The City should review future development proposals to determine whether proposed streets and circulation patterns are adequate. Inadequate street design within new developments increases the need for traffic policing and the possibility of traffic hazards. The recently adopted city standards for required street widths and rights-of-way should be enforced strictly. Additionally, all new subdivisions are to include concrete sidewalks on both sides of all interior streets, as required by the subdivision ordinance for the City of Greenfield and the adopted standard street requirements.

Program 5: Encourage street designs and public improvements that provide adequate pedestrian protection.

Protection of the pedestrian cannot be fully guaranteed without signals, various kinds of street signs and the speed restrictions imposed on vehicular circulation.

However, innovative methods in street planning can, by themselves, insure pedestrian safety more efficiently than any sign system. New street designs using "T" intersections, cul-de-sacs, curved streets and specially designed pedestrian paths facilitate pedestrian protection. In the majority of older cities such as Greenfield, however, the basic framework of the Circulation System is the historically established rectangular grid. Program 5 encourages developments to apply new methods of street circulation, as mentioned above. In addition to the safety factor, they are more economical in design, save space, paving materials and various kinds of utility installations.

The area of Walnut Avenue at the site of the elementary school represents a special problem in terms of pedestrian safety. Adequate safety provisions must be implemented at this site to ensure the safe crossing of children, especially in light of the proposed traffic increase along that roadway.

Policy C: Ensure provision of adequate parking in downtown and residential neighborhoods.

Program 6: Consider the future development of a public parking lot in the downtown area.

Parking in downtown may be a problem in the future. The City should explore the possibility of developing a potential site for a public or merchant parking lot, if sufficient need is apparent.

Program 7: Review off street parking standards for residential and commercial developments annually to ensure adequate parking provisions.

An annual review of off street parking standards should be made to determine whether these standards are keeping pace with the increase in motor vehicles.

Policy D: Encourage provision of a mix of transportation systems to meet the needs of all segments of the population.

As population and energy costs increase, the need to provide a mix of transportation systems for a diverse public also increases. The intent of this policy is to encourage development of other means of transportation to include public transit and bicycle and pedestrian paths.

Program 8: Support County programs that provide transportation services to the elderly and handicapped.

Program 9: Continue to evaluate public surveys and transit needs.

A full study of community interests and needs for public transit should be made in order to determine what kinds of public transit, if any, should be developed or expanded. Public transit opportunities range from: expanded scheduled service in South County via subsidies to existing carriers; to use of a van for intracity service; to development of a car pool information center for employees commuting to and from Greenfield. Public transit will become more important, especially if anticipated industrial development occurs, thus generating employees and a greater potential for commuting.

Program 10: Encourage development of bicycle paths in new residential developments.

Future residential developments should provide street widths that can accommodate bicycle lanes. As the City's population grows, encouragement of the use of bicycles within the City will help alleviate potential traffic problems.

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Environmental Assessment

Environmental Management Consultants

Draft Environmental Impact Report
for the
Planning Management System
City of Greenfield

May, 1981

Prepared for
The City of Greenfield, California

by
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1.0 INTRODUCTION

1.1 Authorization and Purpose

On December 26, 1980, the Cities of Greenfield, Soledad and Gonzales determined that an Environmental Impact Report (EIR) should be prepared on the Draft General Plan. Pursuant to the determination, this draft EIR has been prepared using information available from private and governmental sources noted herein.

This Report has been prepared in compliance with the California Environmental Quality Act (CEQA) of 1970,[1] as amended, to inform public decision makers and their constituency of the environmental effects of projects they propose to implement or approve. It includes suggestions for mitigating adverse impacts and provides alternative solutions for environmental problems that would be created by the proposed plan. In accordance with the California Environmental Quality Act (CEQA), this report cites significant concerns, such as use of agricultural land, urban services, traffic and air quality. The initial study, included as Appendix A, indicates those subjects deemed insignificant and thus not covered in detail in the body of this Report.

A Planning Management System is being prepared for Greenfield, Soledad and Gonzales, located in the Salinas Valley. Once completed, this system will serve three functions:

- a) It will provide policy directions and programs to address future land use, housing and circulation issues.
- b) It will provide the three Cities with base environmental data to use during evaluation of future projects.
- c) It will provide a Resource Evaluation and Implementation Format to aid the assessment of future urban service capacities. This then can be used in the review of proposed developments and in planning for capital improvement programs.

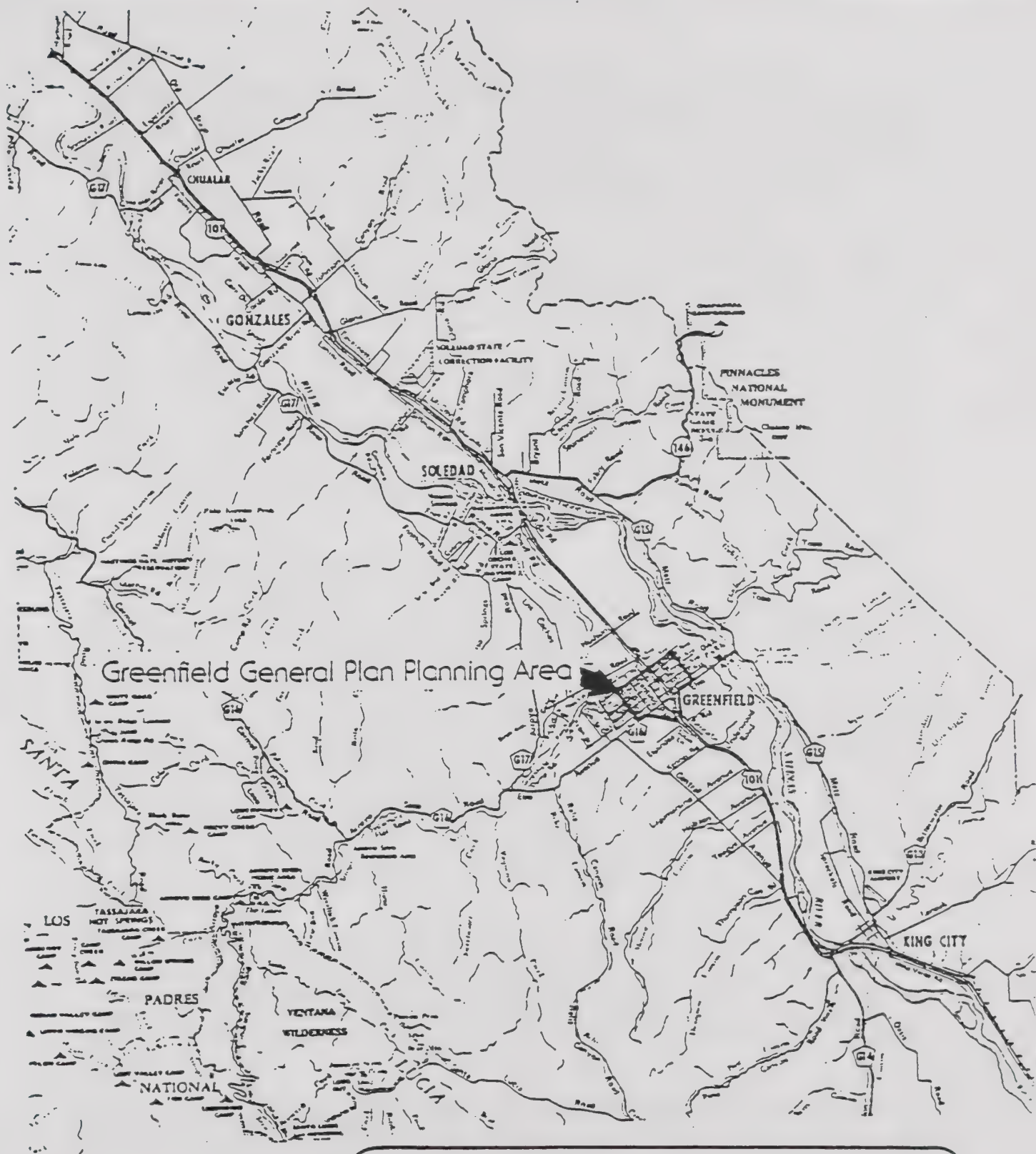
1.2 Plan Description

Location

The City of Greenfield is located approximately 37 miles south of Salinas, within the productive agricultural Salinas Valley. Highway 101 transverses the City and follows the northwest-southwest trend of the Salinas Valley. Surrounded by agricultural lands, the City is provided a view of the Gabilan Mountain Range to the east and the Santa Lucia Mountains to the West. Map 1 illustrates the regional location of the Greenfield Planning Area.

General Plan Revision Background

The General Plan revision is the community's commitment to how they would like the area to change over time. It is a policy statement of



Greenfield General Plan Planning Area



Greenfield General Plan E.I.R. Regional Location Map 1

Source: California State Auto Association

the city's intentions for the future and, as such, serves as a useful tool for local decision makers. The City of Greenfield's General Plan Revision is the result of more than 6 months of work by the Planning Commission, City Council, a Citizens Advisory Committee, City Staff and consultants. It represents a guide for future planning decisions in the City in regard to Land Use, Housing and Circulation Issues.

The Plan is comprehensive in nature in that it addresses the physical, social and economic concerns and interests raised during the General Plan Revision Process, by the participating groups, committees and citizens in Greenfield. It is a general policy statement, providing direction for planning decisions and the opportunity for revisions as community values and circumstances change and as local, state or national trends or events affect the activities of the community. However, it also is intended to provide specific guidance in regard to solving today's problems. The policies and programs are designed to establish the basis for present and future land use decisions. Some proposals can be carried out now; others may be realized 15 to 20 years in the future.

Plan Objectives and Description

The Planning Management System consists of three documents: Policy Plans for General Plan Elements, Master Environmental Impact Reports, and Resource Evaluation and Implementation Formats.

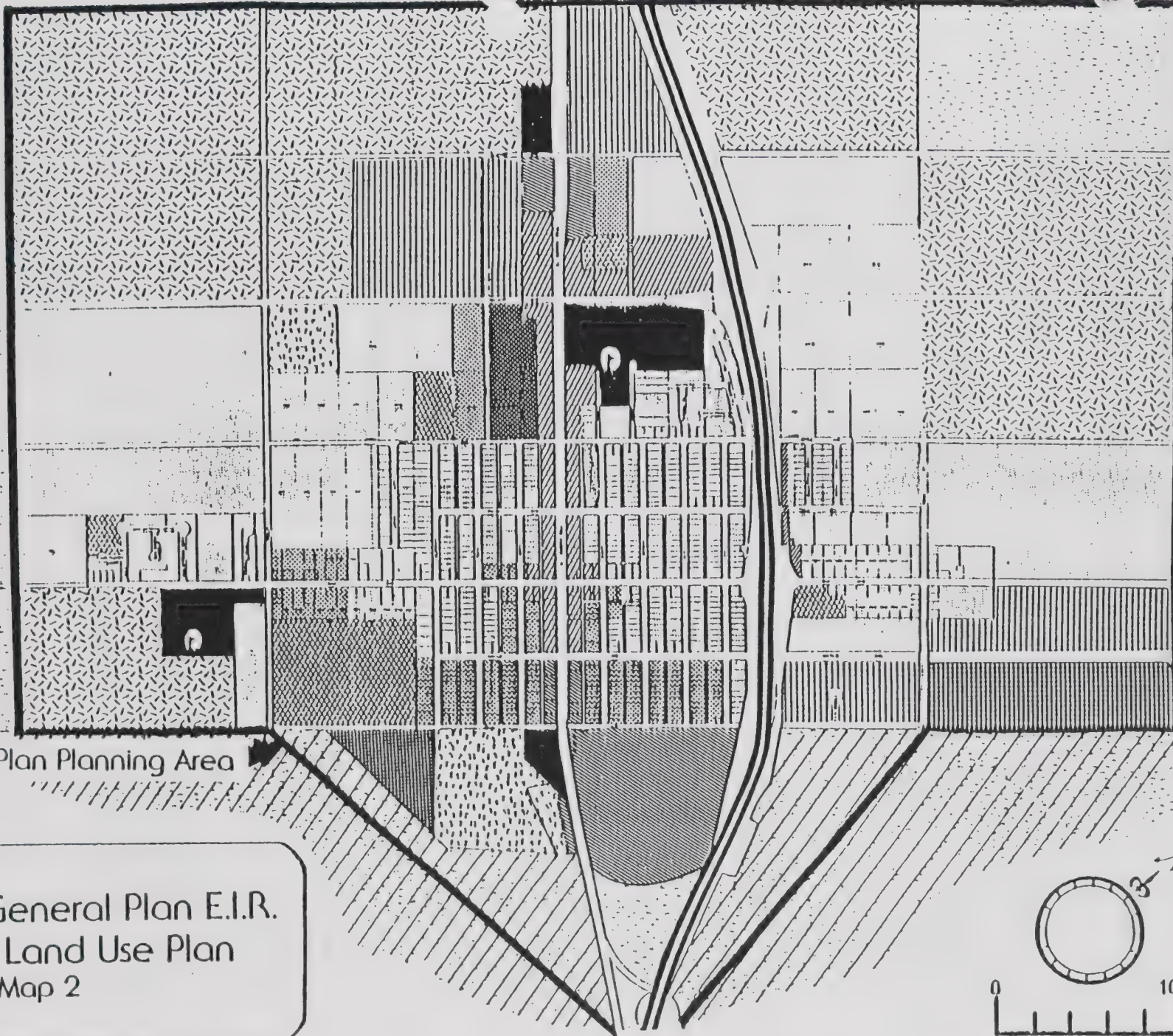
Within the Policy Plans for the General Plan are Land Use, Housing and Circulation Elements. These elements describe local issues, identify City goals based on general desires of the community, and develop policies to provide planning direction to address the issues cited. Specific programs are proposed which identify actions to implement the policies. Included within the elements is a Land Use Plan Map. (See Map 2, Proposed Land Use Plan.) The Policy Plans are intended to be reviewed at least every 5 years so that they may be kept current as the community develops.

This document constitutes the Master Environmental Impact Report for the City of Greenfield's General Plan Revision. The EIR serves two functions: it provides base data in all areas of environmental concern so that the City will have complete information to assist its environmental review process; and it also relates the Policy Plans to environmental issues.

A Resource Evaluation and Implementation Format also is being developed to help the City to define urban service capacities. It will allow the City to plan for future development and to provide a mechanism for updating and revising the Policy Plans.

General Access and Existing Services

The City of Greenfield is accessed by U.S. Highway 101, which runs north-south through the City, and also by El Camino Real, running parallel to Highway 101 to the west. Future expansion areas, identified in



Greenfield General Plan E.I.R. Proposed Land Use Plan Map 2

A diagram of a circular structure, possibly a cross-section of a pipe or a well, with a scale bar below it. The scale bar is labeled "Scale in Feet" and has markings from 0 to 1000. The circular structure is divided into segments, and a small "3" is written near the top right of the circle.

Map 2 (Proposed Land Use Plan), will be accessed through extensions of the City's existing circulation system.

Public services consist of water, sewage treatment, police and fire protection, schools and parks. These are discussed in Section 2.9 of this Report.

Local convenience shopping is available within the City of Greenfield and more shall be provided as the City expands upon implementation of the Plan. More extensive shopping also is available in Salinas, 37 miles to the north.

Subsequent Environmental Review

This EIR shall be used as the foundation document for EIRs subsequently prepared for specific projects within the Greenfield Planning Area. Because specific land uses and parcel sizes are undetermined at this time, this EIR serves to meet the California Environmental Quality Act (CEQA) requirements for the General Plan. The subsequent EIRs may reference and summarize material in this EIR on the General Plan for the description of the general environmental setting and as much of the description of the environmental impacts as applies to the specific project. Detailed information in the EIR on a subsequent specific project may be limited to a description of the project, the specific environmental setting and those impacts which are not adequately described for the specific project in this EIR.

1.3 Existing General Plan and Zoning

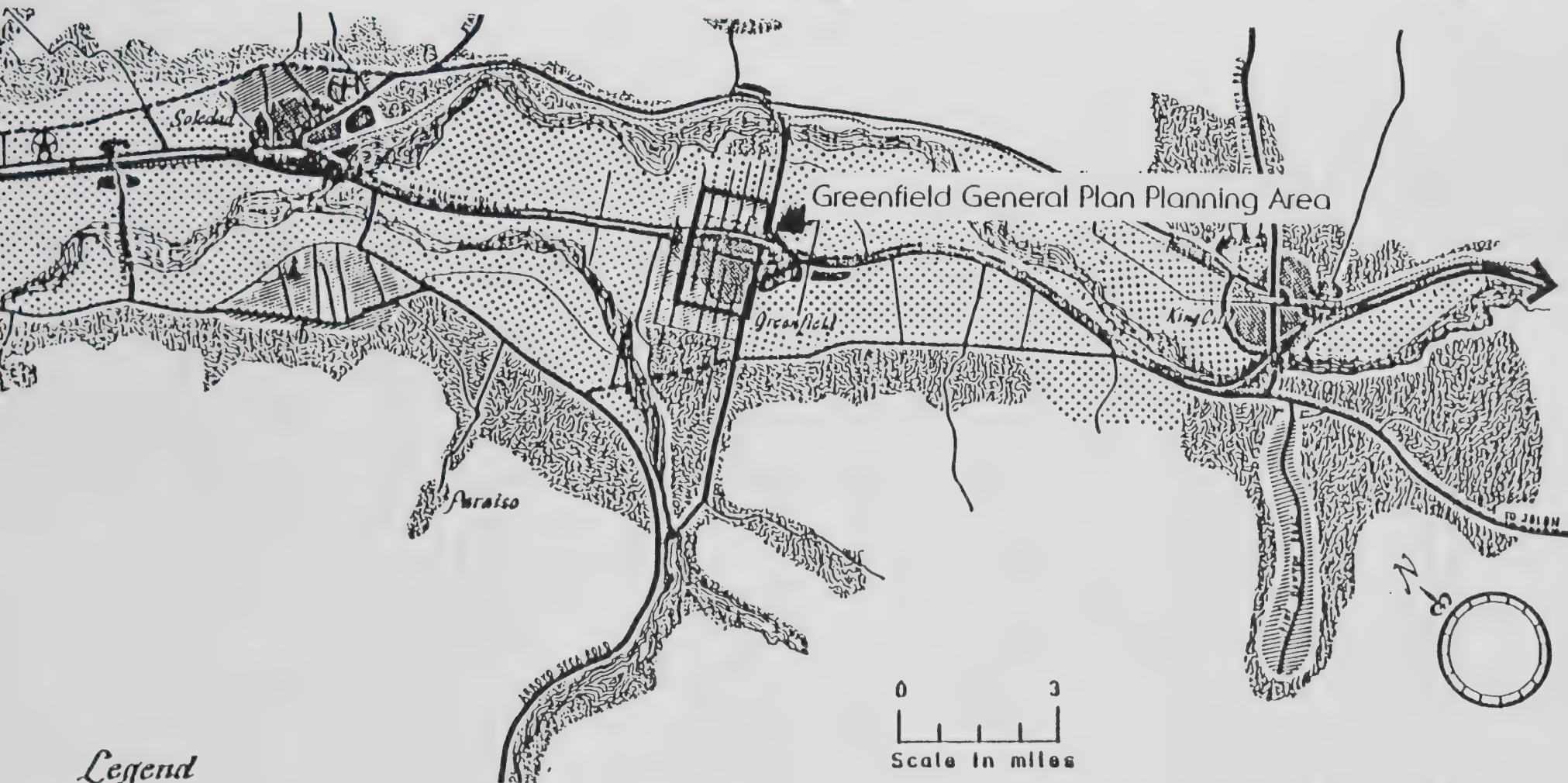
Central Salinas Valley General Plan [2]

This plan, which is part of the Monterey County General Plan, covers an area slightly wider than the main Salinas Valley Floor, from Chualar in the north to King City in the south. The Plan designates that area within the City of Greenfield boundaries as "urban". The majority of the area presently within City boundaries is developed. The area to the west and east of Highway 101 is designated "rural". Portions of the area to the south of the City, along El Camino Real, are identified as industrial. All other land to the northeast and south of the the City are designated "agricultural". The existing Salinas Valley General Plan is illustrated on Map 3. This plan currently is being revised by the County of Monterey.

City of Greenfield General Plan Elements [3]

Scenic Highway Element

Arroyo Seco Road, from El Camino Real west, is designated as a Scenic Highway by the City's General Plan. Proposed scenic corridors designated in the plan also include Elm Avenue east of El Camino Real, and Oak Avenue from Fourteenth Street east to Metz Road, east of the Salinas



Legend

- | | |
|--------------------------|-----------------------|
| Urban | Grazing and Mountains |
| Rural | Open River Bolt |
| Industrial | Airports |
| Agricultural | Prison |
| Agricultural Residential | Proposed |
| Recreation | Roads |
| Water Storage | Freeway |
| Schools | Major |
| Missions | Extensions |
| | Secondary |
| | Minor Roads |

Greenfield General Plan E.I.R. Central Salinas Valley General Plan Map 3

Source: Monterey County Planning Dept.

River. These roads, if designated, would be bordered by a scenic corridor. The Scenic Highway Element speaks to viewshed protection both within and outside of the scenic corridor boundary.

The main objective of this element, in relation to the proposed Plan, is to maintain the scenic route, when and if designated, as an integral part of the setting through which it passes, and to retain scenic beauty, native vegetation and a rural atmosphere. Consideration and implementation of these ideals should occur where development is to be implemented along proposed scenic routes. The Scenic Highway Element of the General Plan for the Cities of Greenfield, Gonzales, Soledad, and King City was prepared in May of 1973. The principles for development within the scenic route corridor include:

- a) Provide for normal use of land but protect against unsightly features.
- b) Locate transmission lines and towers outside of scenic corridors when feasible. Place all new installations underground or screen from view of the scenic highway, if feasible.
- c) Establish agricultural and sight design review by the appropriate local jurisdiction.
- d) Use landscaping to increase scenic qualities.

Development within the expansion area in Greenfield could have a significant visual effect on the users of these proposed scenic roads in and around the City of Greenfield. In accordance with the City's Scenic Highway Element of the General Plan, land use regulations should be implemented in this case. Screening, landscaping and a color scheme that blends with the natural surroundings and overall environment should be implemented for subsequent development.

Noise Element

The ultimate goal of the Noise Element prepared for the Cities of Greenfield, Gonzales, Soledad and King City is to encourage land utilization patterns which will separate uncontrollable and undesirable noise sources from residential and non-residential noise-sensitive areas. The immediate goal is to reduce the level of noise so that it does not cause human stress or health damage. In addition, noise should not interfere with any reasonable activities and expectations of citizens and businesses.

In accordance with the element, most of the area planned for expansion is outside the 50 decibel contour in a lower amplitude sound area. (See Map 12 in Section 2 of this Report.) However, the areas adjacent to Highway 101 and the industrial expansion area to the south of the City are subject to higher noise levels. See Section 2.6, Noise, of this Report.

Conservation Element

The Conservation Element of the General Plan of the Cities of Greenfield, Gonzales, Soledad and King City describes the natural resources of the Central Salinas Valley region and outlines standards for optimizing their use. The natural resources to be conserved, preserved and maintained are: water, vegetation, prime soils, agricultural lands, mineral and other natural resources, and fish and wildlife habitats.

The primary natural resource within the planning area is agricultural soils. The fertile soils of the valley floor and the favorable climate are suitable for a variety of year-round crops. Agriculture contributes heavily to the economic base of the City of Greenfield and to the County of Monterey. In the Conservation Element it is recommended that programs encouraging agricultural reserve areas and exclusive agricultural zoning for prime soil promoted and supported. Protection of prime agricultural land should be given consideration in all instances where urban development is not an urgent necessity.

Further discussion of relevant aspects of the Conservation Element are given in Section 2.3, Soils, and Section 2.4, Hydrology, of this report.

Open Space Element

The Open Space Element of the Cities of Greenfield, Gonzales, Soledad and King City has among its basic objectives:

- a) to preserve and protect the prime and productive agricultural land and agricultural economy of the Central Salinas Valley area;
- b) to preserve and protect the scenic natural resources and lands of the planning areas of the four cities;
- c) to protect open space lands that also are valuable watershed areas; and
- d) to preserve the quality of existing water supply and adequately plan for the expansion and retention of valuable water supplies for future generations.

Agricultural lands are encouraged as a means of providing open space and should be separated and protected from other uses whenever possible. The Open Space Element recommends that only those uses related to agriculture should be located on prime agricultural lands. It is recognized that land will be needed for urban expansion and that steps should be taken to direct this growth. In addition, the intrusion of easements and rights-of-way for public utilities, power transmissions and transportation are encouraged to be as negligible as possible.

The proposed Land Use Plan and subsequent developments would affect open space around the City of Greenfield. Further discussion of this topic is given in Section 2.3, Soils, and Section 2.5, Aesthetic Considera-

tions, of this Report. The City of Greenfield currently has 2 small neighborhood parks within its limits. It should be noted that the State of California typically recommends at least 10 acres of park land per 1,000 population. See the discussion of Parks under Section 2.9 of this Report.

Safety Element

The assurance of safety within the City of Greenfield is dictated by the guidelines for the protection of the community in the event of fires, earthquakes, flooding and other civil emergencies.

Fire Hazard. The hazard from wildland and structural fire is related directly to several factors: the various combinations of vegetative cover; the summer climate conditions; the prevailing slope; and the type and intensity of land use. Structural fires, in and adjacent to the City, constitute a major hazard to its well being. Further detailed discussion of this subject can be found under "Fire Protection" in Section 2.9 of this Report.

Geologic Hazards. The general goal in mapping geologic hazards is to reduce loss of life, injuries, damage to property, and economic and social dislocations resulting from earthquakes. Geologic hazards are discussed further under the Seismic Safety Element in this section and Section 2.2, Geology, of this Report.

Flood Hazards. In accordance with the Federal Flood Insurance Administration flood hazard boundary maps, hazards related to flood inundation from natural drainage in the planning area do not apply to any areas within the City. The failure of either the Nacimiento Reservoir (in San Luis Obispo County, 40 miles southwest) or the San Antonio Reservoir (30 miles southwest) is considered to be a very low risk hazard. If failure did occur, through either seismic activity or war emergency, the City of Greenfield would be affected to only a small degree under most conditions, other than something approaching the 100 year storm runoff coinciding with the failure. This is due mainly to the distance from the reservoirs and the opportunity for the largest volume of water to dissipate on the intervening lands before reaching the City of Greenfield. Travel time of peak flood is estimated to be 14 hours from San Antonio Dam and 15 hours from Nacimiento Reservoir.

Seismic Safety Element

The Seismic Safety Element of the Monterey County General plan was adopted by the Monterey County Planning Commission on December 17, 1975, and by the Board of Supervisors on February 17, 1976. The City of Greenfield's Seismic Safety Element has been derived directly from the County of Monterey's document. The general goal of the element is to reduce loss of life, injuries, property damage and economic and social dislocation resulting from earthquakes.

The proposed plan is within seismic hazard susceptibility Category II. Burkland and Associates (1975) considered Category II to be of fairly low hazard susceptibility. Further discussion of these hazards can be found under "Seismic Considerations" in Section 2.2 of this Report.

The Seismic Safety Element of Monterey County identifies levels of acceptable risk in relation to the type of facility. Acceptable risk is defined as "the level of risk that the majority of citizens will accept without asking for governmental action to provide protection." Risk levels are correlated directly to the degree a facility is needed after a disaster. Classification of risk levels ranges from Class 1 (highly critical) to Class 5 (least critical).

The general policies set forth by the Seismic Safety Element which pertain to the proposed plan are as follow:

- a. Uses of land should be controlled to avoid exposure to risk in excess of the level generally acceptable to the community.
- b. Critical facilities (such as major transportation links, communications and utility lines and emergency shelter facilities) should be located, designed and operated in a manner which maximizes their ability to remain functional after a great earthquake.
- c. In those instances where critical facilities are located in, or where they cross, high hazard areas, all reasonable measures should be taken to insure continuity or quick restoration of service in the event of an earthquake.
- d. Standards for structural design and other building components should be formulated and applied to achieve safety consistent with acceptable levels of risk.
- e. Existing structures and facilities should be evaluated to identify structural conditions which would present excessive risk in the event of a major earthquake. Priority should be given to identification of critical and high occupancy facilities.
- f. The public should be made aware of hazards and measures which can be taken to protect their lives and property.
- g. Soils reports and geologic investigations are required in all instances in which available information indicates there is a substantial threat to life or property on any site.
- h. The location and extent of areas covered by soil and geologic investigations received by the jurisdiction shall be recorded and reports thereon shall be considered to be public records. Where appropriate, the results of such detailed investigations will be utilized to supplement and supersede more general information.

Further discussion of the geology of the project vicinity and relevant seismic conditions is given in Section 2.2, Geology, of this document.

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Zoning

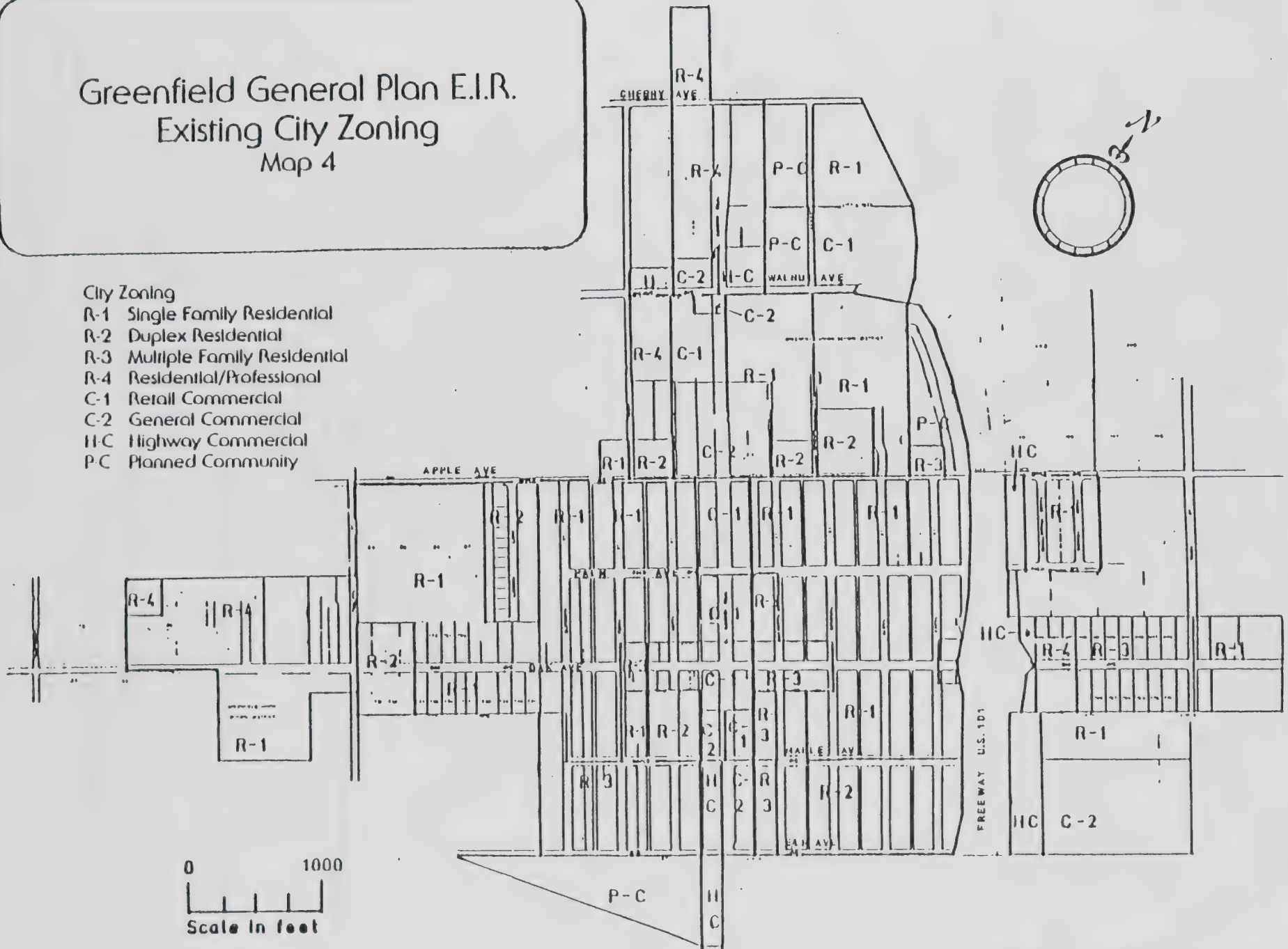
The planning area is partially in the County of Monterey as well as in the City of Greenfield. As development occurs pursuant to this plan, and as annexations to the City occur, re-zonings to City designations will occur. Existing zoning for incorporated and unincorporated areas of the Greenfield Planning Area is shown in Maps 4 and 5.

The Local Agency Formation Commission (LAFCO) has jurisdiction over annexations of unincorporated lands within the County. LAFCO is charged with ensuring that growth occurs in an orderly and planned manner. LAFCO is also charged with assigning spheres of influence to individual cities within the County. A Sphere of Influence is a determination of an urban service boundary for the City. At this time, there is no adopted Sphere of Influence for the City of Greenfield.

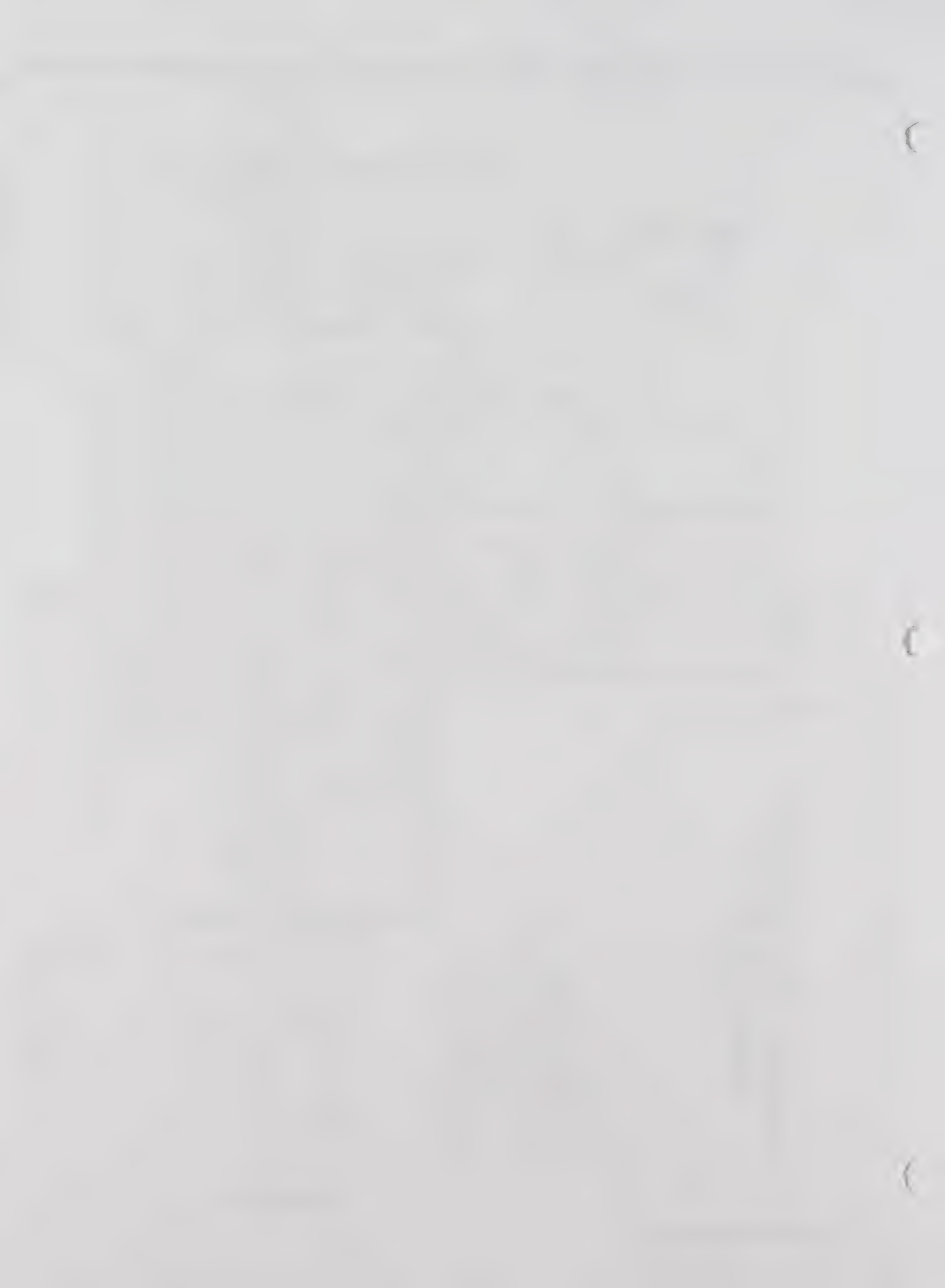
Greenfield General Plan E.I.R. Existing City Zoning Map 4

City Zoning

- R-1 Single Family Residential
- R-2 Duplex Residential
- R-3 Multiple Family Residential
- R-4 Residential/Professional
- C-1 Retail Commercial
- C-2 General Commercial
- H-C Highway Commercial
- P-C Planned Community

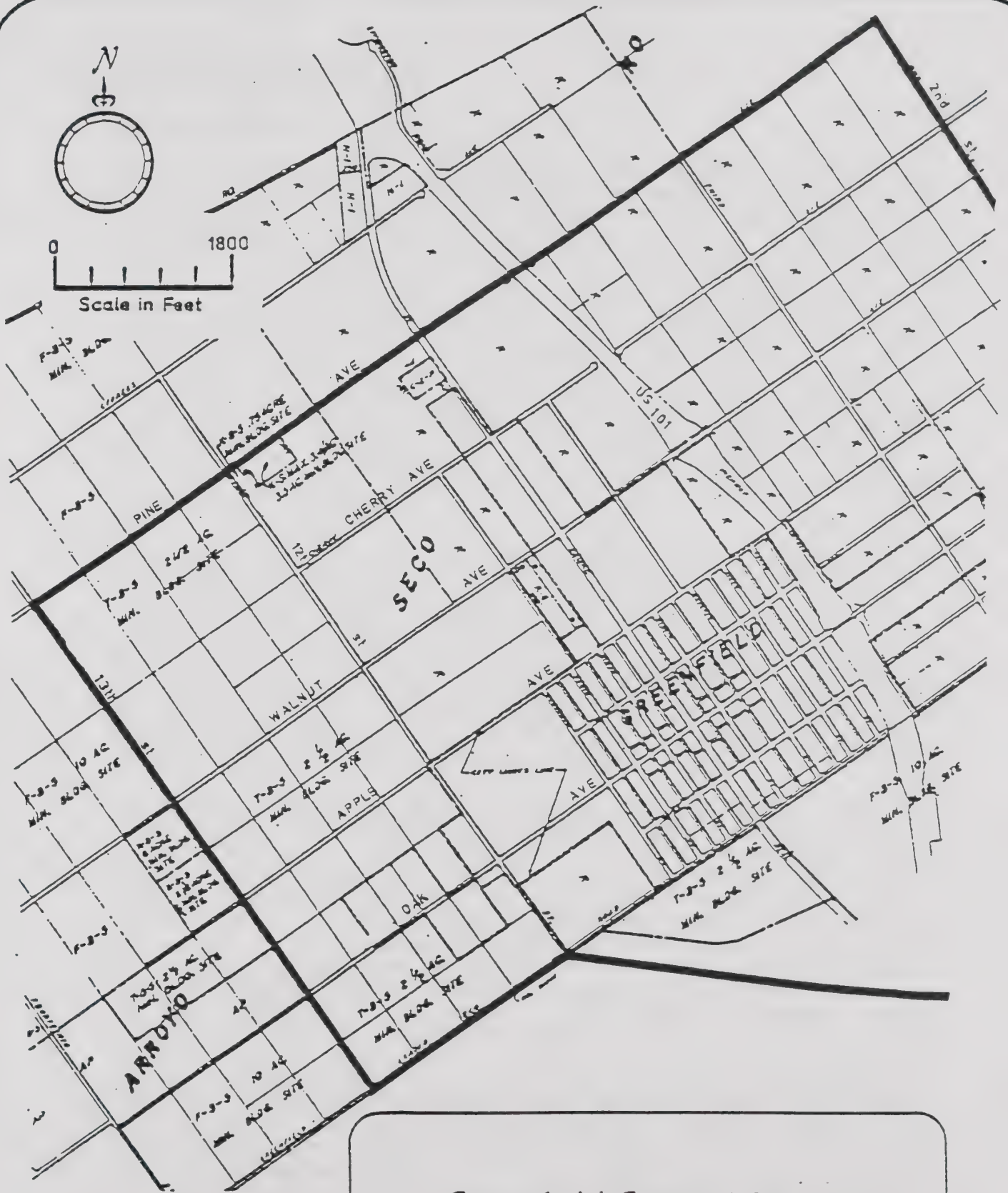


Source City of Greenfield





0 1800
Scale in Feet



Legend
County Zoning
K Agricultural Residential
F-8-5 Agriculture
T-8-5 & T-8-3 Transitional Districts

Greenfield General Plan E.I.R. Existing County Zoning Map 5

2.0 THE ENVIRONMENTAL SETTING

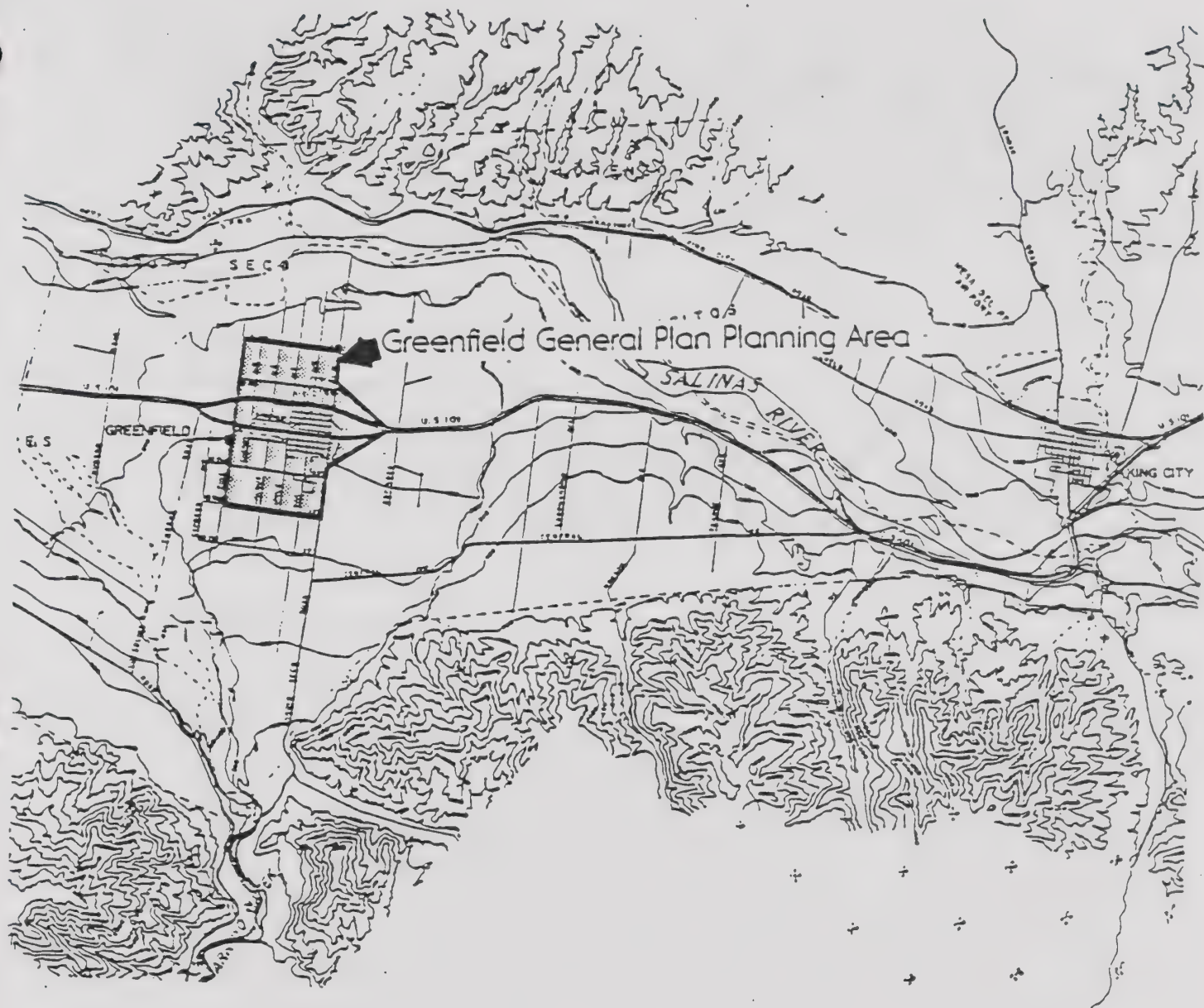
2.1 Regional Setting

The City of Greenfield is located in the heart of the Salinas Valley. The City is centered between the Santa Lucia Range to the west and the Gabilan Range to the east, at an elevation of approximately 307 feet above sea level. The regional setting can be seen in Map 6, a topographic map of the area. The Salinas River, a major geographic feature of this region, constitutes a route to the Pacific Ocean, 145 miles in distance, from its origin east of San Luis Obispo and southeast of Santa Margarita. The river passes the city approximately 3.14 miles to the east. From the west, the Arroyo Seco River drains out of the Santa Lucia Range into the Salinas Valley. The river drains in an eastward direction, passing near the northwest corner of Greenfield, then turning north for a distance of 3.4 miles, where it parallels and then joins the Salinas River. These two rivers are largely responsible for the fertility of the Salinas Valley in the area of Greenfield. They have deposited a majority of the recent alluvial materials that cover the valley floor in this area.

The Salinas Valley is the central and most important physiographic feature of Monterey County. It is about eighty-four (84) miles long; its width ranges from less than one (1) mile at Bradely to 10 to 12 miles in the Salinas area. The elevation at Bradely is 540 feet above sea level; at King City, 332 feet; at Salinas, 50 feet; and at Castroville, 10 feet. The Salinas Valley trends northwest-southeast and lies between the Gabilan Range on the east and the Sierra de Salinas on the west, as far as Arroyo Seco. The Sierra de Salinas is the eastern ridge of a broader mountain system known as the Santa Lucia Range, which lies between the Salinas Valley and the Pacific Coast.

The Santa Lucia Range is moist and rugged; it rises abruptly from the Pacific Ocean to its highest point, Junipero Peak, at 5,844 feet. The Range includes large masses of granitic and metamorphic rocks in the northern part; diatomaceous shale and massive sandstone in the central part; and fractured sandstone, shale and masses of serpentine in the southern part. The Gabilan Range consists chiefly of granitic rocks in the northern part, volcanic intrusions in the Pinnacles area, and calcareous shale further south. Portions of the Santa Lucia Range receive up to 70 inches of rain annually; in comparison, the Salinas Valley in the area of Greenfield receives only 11.27 inches.[4] However, runoff to the valley from the two mountain ranges is significant.

From Greenfield to Castroville, the streams entering the Salinas Valley from the west are short and carry small sediment loads. The streams entering the Salinas Valley from the east are larger and longer, and they form many alluvial fans that have forced the Salinas River to the west side of the Valley.[5] In the southwestern part of Monterey County, the San Antonio and Nacimiento Rivers flow across the Santa Lucia Range in a southeasterly direction, then turn to the east and flow into the Salinas River. In the Greenfield area, it is the Arroyo Seco that feeds the Salinas River.



0 12000
Scale in Feet

Greenfield General Plan E.I.R.
Regional Topography
Map 6

The climate of the Central Salinas Valley exceeds 90° during summer months. Though frost may occur in winter, there are generally no freezing periods, making the region well suited for agriculture. Portions of the Santa Lucia Range receive up to 70 inches of rain annually; in comparison, the Salinas Valley in the Gonzales area receives approximately 15 inches. However, runoff from both the Santa Lucia and Gabilan Mountain Ranges is significant.

2.2 Geology

Introduction

The planning area is located on a recent Quaternary alluvial river deposit with a relatively flat slope. The general slope within the City of Greenfield ranges from zero to three percent. The alluvial deposit is known locally as the Arroyo Seco Cone and was mapped by Tensley (1975) as the Chualar Alluvial Fan. The fan material is composed largely of boulders and cobbles derived from the Sierra de Salinas to the west.

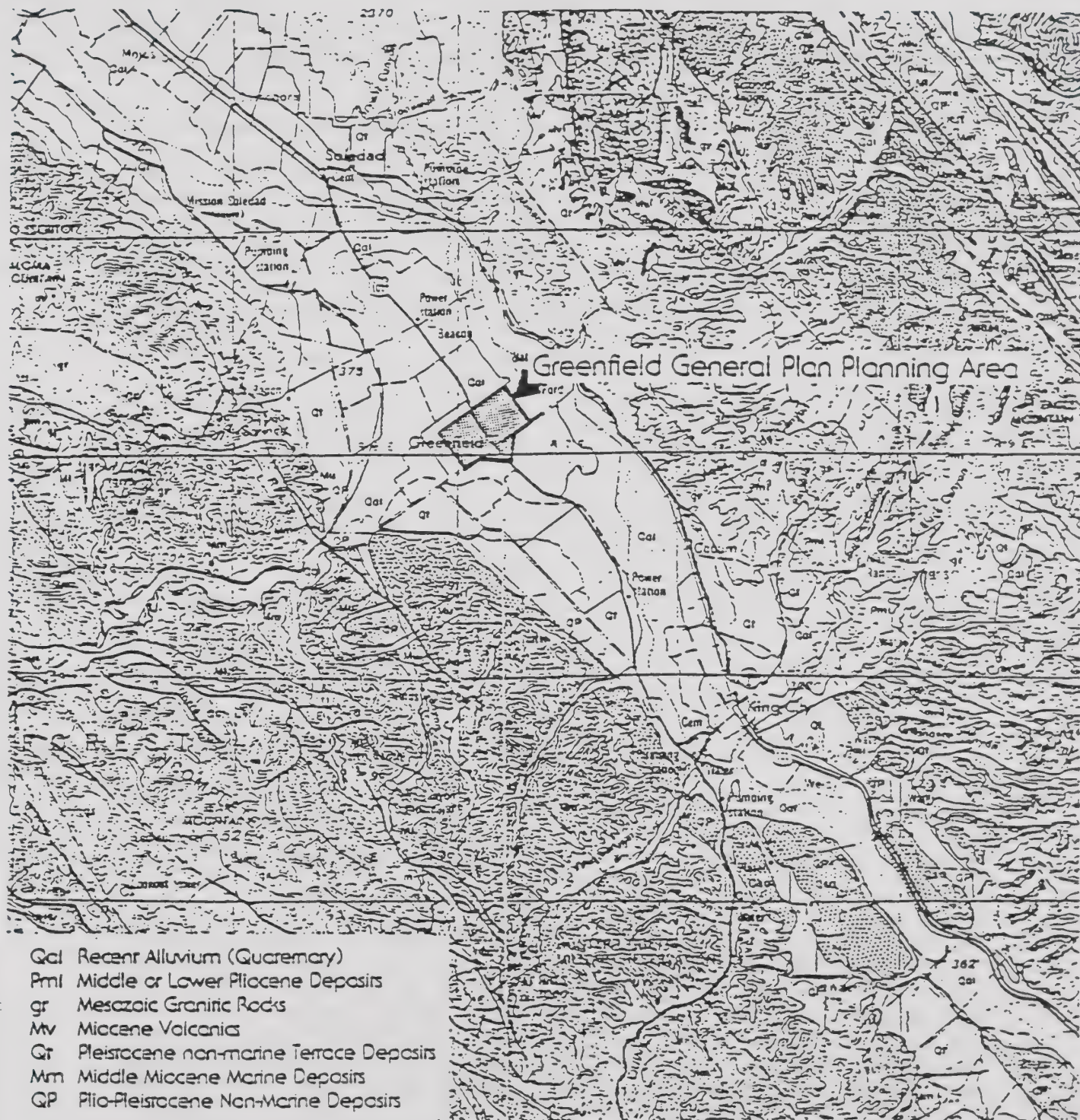
Descriptive Geology

The City of Greenfield is located in a northwest-southwest trending valley carved by the Salinas River. The depth of alluvium which fills the valley is estimated at between 800 and 1000 feet. Recent alluvium of the Quaternary Period (Qal) underlie the City. Low, rolling foothills of the western face of the Gabilan Mountains commence directly north of Gonzales. These upland areas are non-marine terrace deposits of the Pleistocene Epoch, Quaternary Period (Qt). Both Qal and Qt deposits originated from the surrounding mountains. Through the processes of physical and chemical weathering, the parent rock of the higher areas is eroded and transported by water, wind and gravity. Thus, the composition of the valley fill is unconsolidated or loosely consolidated sediments. Map 7 illustrates the Regional Geology of the area.

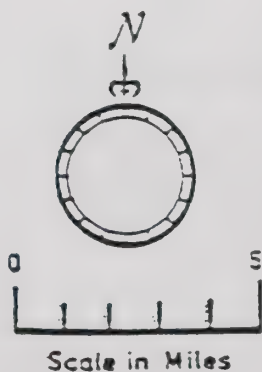
The underlying structure of the Salinas Valley at Greenfield and the surrounding vicinity is complex. Alluvial fan deposits have built up along the eastern side of the valley. The varying velocities of the streams which carried the alluvium, and the changing drainage patterns caused alternating layers of silts, sands, gravels, cobbles and occasional boulders to be deposited in this area. Therefore, over short distances, the underlying geologic structure can vary considerably. A sloping fan-shaped topography is apparent when one looks from the valley floor toward small stream canyons on the western slope of the Gabilan Mountains.

Regional Faulting

The City of Greenfield is located in a seismically active area, as is the entire State of California. Table 1 lists faults in the area which are considered to be active or potentially active and able to contribute to high magnitude earthquakes. Map 8 illustrates faults and fault zone locations.



- Qal Recent Alluvium (Quaternary)
- Pml Middle or Lower Pliocene Deposits
- gr Mesozoic Granitic Rocks
- Mv Miocene Volcanics
- Qt Pleistocene non-marine Terrace Deposits
- Mm Middle Miocene Marine Deposits
- QP Plio-Pleistocene Non-Marine Deposits



Greenfield General Plan E.I.R. Regional Geology Map 7

C

C

C

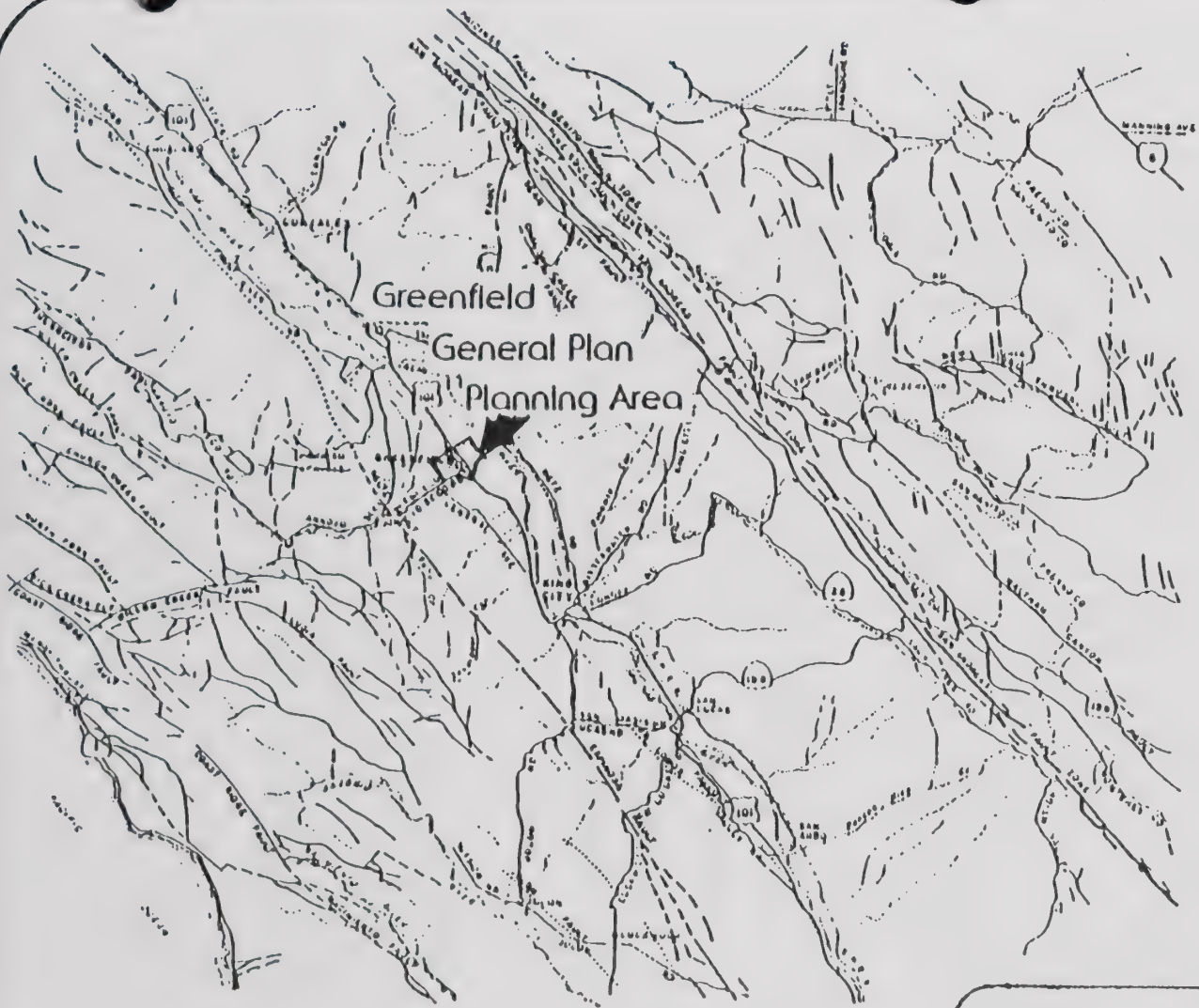
Table 1
Regional Faulting

Faults and Fault Zones [6]	Least Miles From Project	Direction	Movement Within Quaternary Period Preliminary Fault Map
San Andreas (surface trace)	12	NE	yes
Bear Valley (surface trace)	16	E	yes
Reliz (concealed trace)	13	S/SW	yes
(surface trace)	16	S/SW	
King City (concealed trace)	3	W	yes
Tularcitos (surface trace)	11	SW	no
Pinnacles (surface trace)	12.5	SE	no
Chalone Creek (surface trace)	15	E	no

The fault closest to Greenfield is the Reliz Fault Zone, which lies approximately 4 miles west of the City. The primary earthquake fault with the greatest potential of activity is the San Andreas Fault. It is a well known, active fault, considered to be potentially dangerous to regions in California that lie within 50 to 100 miles of its trace.[7] The San Andreas is known historically to be capable of earthquakes exceeding 7 on the Richter Scale at many points along its 400-500 mile length.

Seismic Considerations

The City of Greenfield is bound on both sides by active or potentially active fault zones although no active faulting is present within the City's planning area. Map 8 shows the location of fault zones in the vicinity of the planning area. The severity of earthquakes usually is



LEGEND

- FAULT LINE
- - - - - FAULT LOCATION IS APPROXIMATE OR INFERRED
- FAULT IS CONCEALED BY YOUNGER ROCKS OR BY LAKES OR RIVERS
- FAULT CLASSIFICATION (INDICATING SENSE OF MOVEMENT)
- FAULT HAVING MOVED DURING HISTORIC TIMES (APPROXIMATELY 366 YEARS)
- QUATERNARY FAULT DISPLACEMENT (DURING LAST 2 MILLION YEARS) WITHOUT HISTORIC (APPROXIMATELY 366 YEARS) RECORD
- LOCATIONS OF FAULT CREEP SLIPPAGE - SLOW GROUND DISPLACEMENT USUALLY WITHOUT ACCOMPANYING EARTHQUAKES



Greenfield General Plan E.I.R. Regional Faulting Map 8

Source: U.S. Geologic Survey H.G. Green 1977



measured in terms of magnitude and intensity. Magnitude is expressed according to the Richter Magnitude Scale, which is an instrumental measure of the amplitude of seismic waves and is related to the amount of energy release. Intensity is a subjective measure of the force of an earthquake at a particular place as determined by observations of its effects on people, structures and earth materials. The intensity scale commonly used is the Modified Mercalli, presented in Table 2. Table 3 shows the relationship between the size of an earthquake (Richter Magnitude) and the observed effects (Modified Mercalli). The estimated magnitude of the nearest earthquake epicenters primarily lie within the 1.5 to 2.5 range, occurring within a 6 mile radius of the City.

The intensity of ground shaking and the potential for subsequent building and structural damage are influenced profoundly by local soil conditions. Recent alluvium reacts strongly to the seismic waves generated by an earthquake. The characteristics of the underlying soils and/or rocks, the duration, magnitude and proximity of the earthquake, and the depth to the water table all are equally important factors which affect ground response. In recent years, considerable evidence has indicated that structural damage resulting from ground shaking is influenced by engineering properties of the soil and soil depth. Details of soil deposits found within the Greenfield Planning Area are discussed in Section 2.3, Soils, of this Report. Damage to structures is particularly likely to occur when a natural point of vibration of a building is similar to that of the soil deposit upon which it is constructed. Thus, low, short period buildings tend to suffer major damage due to ground shaking when they are located on shallow, short period soil deposits. Likewise, tall multi-story buildings tend to suffer greater damage when they are located on deeper, long period deposits.

Damage to structures from ground shaking is caused by the transmission of earthquake vibrations from the ground into structures; in addition to soil characteristics, factors determining the extent of damage are:

- a. the design and configuration of the structure;
- b. the quality of the materials and workmanship used in construction;
- c. the location of the epicenter and magnitude of the earthquake;
- d. the duration and character of the ground motion.

Ground failure is another seismic hazard of concern in areas underlain by recent alluvium. The more saturated the soil, the greater the chance that the soil will lose cohesiveness during ground shaking. The potential for ground failure is related to the duration and intensity of shaking, the location and magnitude of the quake and the conditions of the ground. Ground failure resulting from shaking can occur in the form of liquefaction, lurch cracking, lateral spreading and slope failure.

Liquefaction occurs when soil becomes saturated and loses its strength; its properties resemble those of a heavy liquid, with the response of a structure dependent upon its densities. Lighter density structures

Table 2
Modified Mercalli Scale of Earthquake Intensities

THE MERCALLI INTENSITY SCALE
(As modified by Charles F. Richter in 1956 and rearranged)

<i>If most of these effects are observed</i>	<i>then the intensity is</i>	<i>If most of these effects are observed</i>	<i>then the intensity is</i>
Earthquake shaking not felt. But people may observe marginal effects of large distance earthquakes without identifying these effects as earthquake-caused. Among them: trees, structures, liquids, bodies of water sway slowly, or doors swing slowly.	I	Effect on people: Difficult to stand. Shaking noticed by auto drivers. Other effects: Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Furniture broken. Hanging objects quiver.	VIII
Effect on people: Shaking felt by those at rest, especially if they are indoors, and by those on upper floors.	II	Structural effects: Masonry D* heavily damaged; Masonry C* damaged, partially collapses in some cases; some damage to Masonry B*; none to Masonry A*. Stucco and some masonry walls fall. Chimneys, factory stacks, monuments, towers, elevated tanks twist or fall. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off.	
Effect on people: Felt by most people indoors. Some can estimate duration of shaking. But many may not recognize shaking of building as caused by an earthquake; the shaking is like that caused by the passing of light trucks.	III	Effect on people: General fright. People thrown to ground. Other effects: Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes. Steering of autos affected. Branches broken from trees.	
Other effects: Hanging objects swing. Structural effects: Windows or doors rattle. Wooden walls and frames creak.	IV	Structural effects: Masonry D* destroyed; Masonry C* heavily damaged, sometimes with complete collapse; Masonry B* is seriously damaged. General damage to foundations. Frame structures, if not bolted, shifted off foundations. Frames racked. Reservoirs seriously damaged. Underground pipes broken.	IX
Effect on people: Felt by everyone indoors. Many estimate duration of shaking. But they still may not recognize it as caused by an earthquake. The shaking is like that caused by the passing of heavy trucks, though sometimes, instead, people may feel the sensation of a jolt, as if a heavy ball had struck the walls.	V	Effect on people: General Panic. Other effects: Conspicuous cracks in ground. In areas of soft ground, sand is ejected through holes and piles up into a small crater, and, in muddy areas, water fountains are formed.	X
Other effects: Hanging objects swing. Standing autos rock. Crockery clashes, dishes rattle or glasses clink. Structural effects: Doors close, open or swing. Windows rattle.		Structural effects: Most masonry and frame structures destroyed along with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes and embankments. Railroads bent slightly.	
Effect on people: Felt by everyone indoors and by most people outdoors. Many now estimate not only the duration of shaking but also its direction and have no doubt as to its cause. Sleepers awakened.	VI	Effect on people: General panic. Other effects: Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land.	XI
Other effects: Hanging objects swing. Shutters or pictures move. Pendulum clocks stop, start or change rate. Standing autos rock. Crockery clashes, dishes rattle or glasses clink. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Structural effects: Weak plaster and Masonry D* crack. Windows break. Doors close, open or swing.		Structural effects: General destruction of buildings. Underground pipelines completely out of service. Railroads bent greatly.	
Effect on people: Felt by everyone. Many are frightened and run outdoors. People walk unsteadily.	VII	Effect on people: General panic. Other effects: Same as for Intensity X. Structural effects: Damage nearly total, the ultimate catastrophe.	XII
Other effects: Small church or school bells ring. Pictures thrown off walls, knickknacks and books off shelves. Dishes or glasses broken. Furniture moved or overturned. Trees, bushes shaken visibly, or heard to rustle. Structural effects: Masonry D* damaged; some cracks in Masonry C*. Weak chimneys break at roof line. Plaster, loose bricks, stones, tiles, cornices, unbraced parapets and architectural ornaments fall. Concrete irrigation ditches damaged.		Other effects: Large rock masses displaced. Lines of sight and level distorted. Objects thrown into air.	

* Masonry A: Good workmanship and mortar, reinforced, designed to resist lateral forces.
Masonry B: Good workmanship and mortar, reinforced.
Masonry C: Good workmanship and mortar, unreinforced.
Masonry D: Poor workmanship and mortar and weak materials, like adobe.

Table 3
Idealized Relationships Between
the Size of an Earthquake (Richter Magnitude)
and the Observed Effects (Modified Mercalli Intensity)^a

Richter Magnitude	2	4	5	6	7	8
Maximum Reported Intensity (occurs within approximate 10 mile radius of epicenter) ^b	I-II	III	IV-VIII	VII-VIII	IX-X	XI

^aFor ordinary ground conditions in metropolitan centers in California, neglecting the effects of increased intensity on unconsolidated ground and lowered intensity on firm rock.

^bSee Table 2 for description of Modified Mercalli Scale.

After C.F. Richter (1958).

(such as utility mains) raise toward the ground surface, and heavier density structures subside. In effect, a "quicksand" condition occurs. During the 1906 earthquake, liquefaction was noted to have occurred in the Salinas Valley.[8]

Lurch cracking is a type of ground failure which is caused by the ground shaking, settling and compaction of soil. Irregular fractures, cracks and fissures are produced, varying in length from a few inches to many feet. Such fractures may displace soil and earth in a manner similar to faults. This hazard is a significant concern in areas underlain by soil, alluvium and weathered rock. Lateral spreading, with accompanying cracking and soil displacements, occurs when the soil moves horizontally toward the open face of an embankment. The available data indicate that these forms of ground failures are most likely to occur in areas underlain by deep, relatively soft, saturated alluvium.

General areas of potential seismic hazards have been mapped and evaluated by Burkland and Associates. The proposed planning area is within seismic hazard susceptibility Category II. Burkland and Associates considered Category II to be of fairly low hazard susceptibility. Category VI is the highest seismic hazard zone. Seismic hazards identified in the vicinity of the Planning Area are given in Table 4. (See Appendix B, Geotechnical Evaluation.)

Table 4
Geotechnical Hazards Identified in the Greenfield Area

	Category II*
Ground Shaking Vibration Damage	minor to major
Ground Failure Liquefaction	moderate to major
Lurch Cracking	moderate to major
Lateral Spreading	moderate
Ground Rupture	generally not applicable
Slope Stability	minor to moderate
Subsidence & Uplift	moderate

*Conditions vary locally. Further investigation is needed to identify whether the hazard is severe on any particular project site.

Source: Burkland & Associates (1975).

Impact

No active faulting occurs within the designated planning area, and local seismic activity is in a moderate intensity zonation. However, ground shaking by earthquakes along the two major regional faults (San Andreas and King City) is expected to produce the greatest seismic hazard to development within the planning area. The area is located in an alluvium-filled valley which responds strongly to seismic waves generated by an earthquake. While ground shaking is a major hazard throughout the valley, ground failure also is anticipated to cause structural damage, depending on the composition and degree of water saturation of the soil.

The type of specific development to be considered within the planning area will play an important part in how it is expected to withstand structural damage during an earthquake.

Mitigation Measures

1. Geotechnical investigations recommended by the Seismic Safety Element are shown in Table 5. Category II specifies routine investigations to be carried out in most areas of geotechnical discipline. Detailed investigations should be undertaken in both engineering geology and seismic hazards evaluation in all instances where available information indicates that there is a substantial threat to life or property. (See Appendix B, Geotechnical Evaluation, which

Table 5
Recommended Investigations for Various Geotechnical Problems

	Site Problem	Routine Investigation
Erosion Control (EC)	erosion, siltation	drainage control and landscaping
Engineering Geology (EC)	fault, landslides,* slope stability,* grading, excavation drainage, groundwater	reconnaissance of the site,(#) review of the literature and maps(#), prepare generalized geologic map, review grading plans, inspect during grading, prepare "as built" geologic map*
Seismic Hazards (SH)	faults, earthquake effects	generalized evaluation of potential primary and secondary earthquake effects(#)
Soil and Foundation (SF)	soils and foundation	obtain soil samples from various depths test for applicable Engineering characteristics, determine groundwater levels, drainage, slope conditions
Slope (SL)	slope stability*	generalized analysis of stability based on geologic soils, and groundwater data(#)
Flooding (FL)	flood	U.S.G.S. Water Resources Division, flood maps, California Division of Water Resources Publications(#)

*Has been determined not applicable to this Plan.

(#)Has been completed through field investigation and research on the Plan, for inclusion within the context of this Report.

Source: Burkland and Associates, Geotechnical Study for Monterey County, 1975.

further explains recommended investigations for different types of developments.) Results of geotechnical investigations should be incorporated into the design and construction of subsequent development.

2. All new construction must meet the seismic building standards required in the most recent edition of the Uniform Building Code applicable at the time of development. Standards for structural design and other building components should be formulated and applied to achieve safety consistent with acceptable levels of risk, as defined in the Seismic Safety Element.
3. Critical facilities (such as major transportation links, communications and utility lines and emergency shelter facilities) should be located, designed and operated in a manner which maximizes their ability to remain functional after a major earthquake. In those instances where critical facilities are located in, or where they cross, high hazard areas, all reasonable measures should be taken to insure continuity or quick restoration of service in the event of an earthquake.
4. The location and extent of areas covered by soil and geologic investigations received by the jurisdiction shall be recorded and the reports themselves shall be considered to be public records. Where appropriate, the results of such detailed investigations will be utilized to supplement and supersede more general information.

2.3 Soils

The Soil Conservation Service, in its survey of Monterey County dated April, 1975, classifies most soils of the Greenfield planning area as Arroyo Seco gravelly sandy loam (AsA).[9] This is a nearly level soil on alluvial fans and plains, with a slope of 0% to 2%. The other soil within the planning area is classified as Elder Loam (EcA). Both soils are illustrated in Map 9.

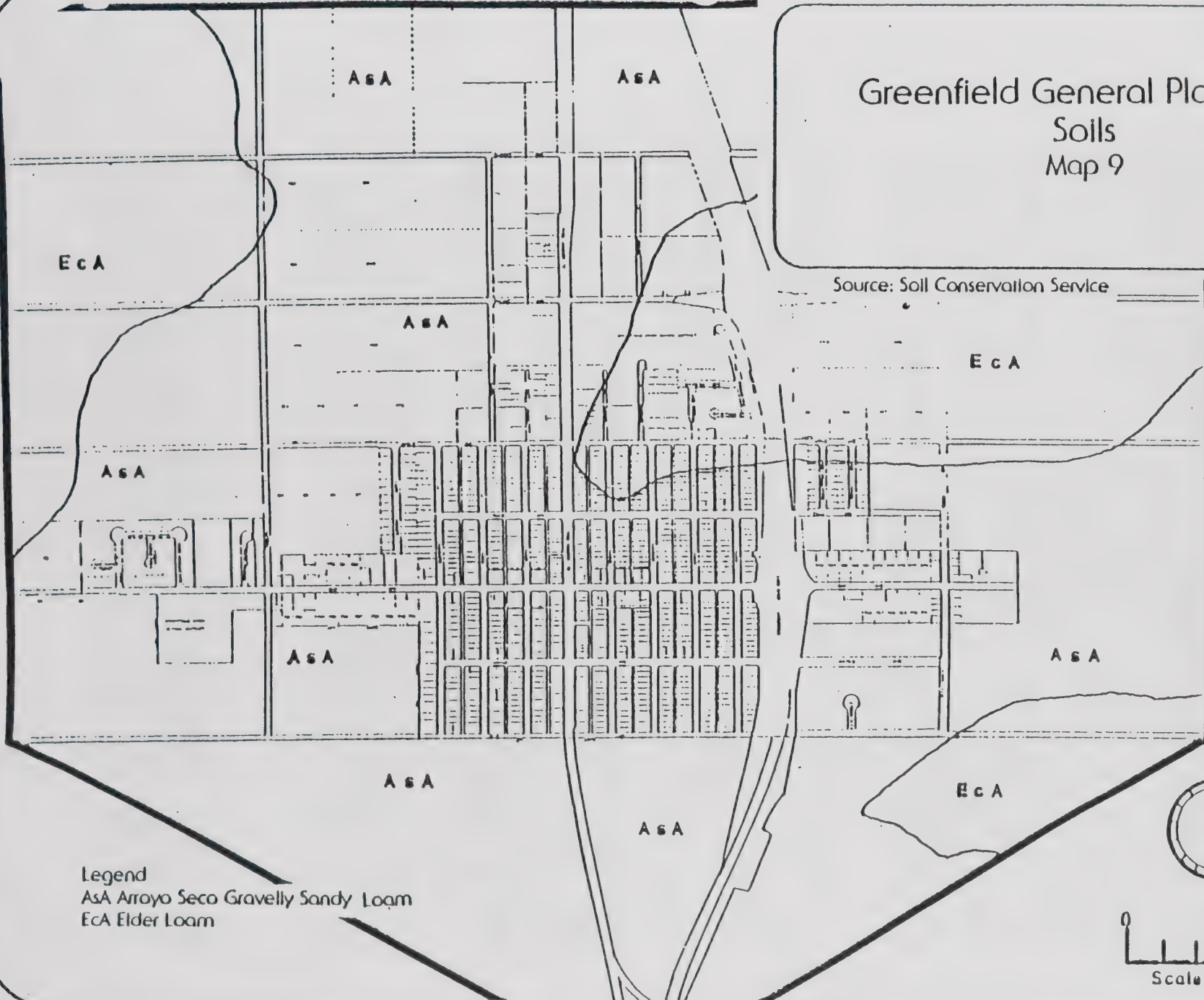
Most of the surface soil in the Greenfield area has been tilled recently and is loose and uncompacted. The surface soil (Arroyo Seco gravelly sandy loam) consists of a reddish-brown, gravelly, loamy silt and contains from 5% to 15% gravel and scattered cobbles; the quantity of cobbles gradually increases to the south of the planning area.

The surface soil of Elder Loam is similar to the Arroyo Seco, but the surface layer is loam, fine or very fine sandy loam. Generally, the gravel content ranges from 0% to 15%.

The Arroyo Seco gravelly sandy loam and Elder loam soils typically have high permeability rates; the permeability increases with the additional gravel and cobbles at increasing depths. The soils both are typically non-expansive to slightly expansive. Few limitations for development from these strong sub-base soils are anticipated. It is anticipated that there will be no compaction, sediment or trenching problems with these soils. They will be good for trench backfill once the cobbles are removed. (See Appendix C, Preliminary Soil Analysis of the Greenfield Area.)[10]

Greenfield General Plan E.I.R.
Soils
Map 9

Source: Soil Conservation Service



Legend
AsA Arroyo Seco Gravelly Sandy Loam
EcA Elder Loam



The physical and chemical properties of the Arroyo Seco and Elder soils can be seen in Table 6. The soils exhibit only slight hazards for all types of development and roads, and they are considered, once compacted, to be good material for roadfill. The soils are used mostly for irrigated row and field crops, with some areas used for orchards and vineyards. The Arroyo Seco and Elder Soils are rated in capability units IIs-4(14) and IIs-4(14), respectively.

Table 6
Soil Properties

	Arroyo Seco	Elder Loam
Depth	0 to 60 inches	0 to 60 inches
Permeability	2 to 6 inches	0.6 to 20+ inches
Available water capacity/inch	0.03 to 0.10 inches (reduced somewhat by coarse fragments in profile)	0.01 to 0.15 inches
Soil reaction	6.1 to 8.4 (pH)	5.6 to 7.3 (pH)
Risk of Corrosion		
uncoated steel	Moderate	Low
concrete	Low	Low
Runoff	Slow	Slow
Erosion Hazard	Slight	Slight

Capability grouping shows, in a general way, the suitability of soils for most kinds of row crops. Currently the majority of vacant lands surrounding the City of Greenfield are in agricultural production. The Soil Conservation Service has categorized soils into classes, subclasses and units to aid in evaluating the potential and/or limitations of soils. Capability classes are the broadest groups, designated by Roman numerals I through VIII. The higher the numeral, the greater the limitations and the narrower the choices of practical use for the land.

The soils in the Greenfield area are in Classes I and II. Class II soils are considered "prime" agricultural lands.[11] Class II and III soils are suited for cultivation, pasture, rangeland, woodland, wildlife or urban uses. Future development within Greenfield will occur on Class II and III soils.

Impact

Construction activities related to subsequent development, such as movement of heavy equipment, excavation and the addition of various landscape and building materials, will alter surface level permeability. The placement of utility lines, roads and buildings will cause soil compaction and add impervious material to semi-natural land.

The loss of agricultural productivity that would occur as a result of implementation of the Land Use Plan will be, for all practical purposes, an irreversible impact. According to Map 5, Agricultural Resources, of the Draft General Plan, portions of the planning area contain prime agricultural land (Elder Loam Soils).

Agricultural lands surrounding urbanized areas are subject to urban/agricultural conflicts. These conflicts reduce productivity by precluding normal agricultural processes near urban uses, and include:

- a. farming operation noise;
- b. farming dust, dirt and mud;
- c. use of toxic pesticides and odorous fertilizers;
- d. farm equipment vandalism;
- e. theft of produce; and
- f. inability to utilize farming techniques such as aerial spraying.

Individual farmers who wish to continue farming may face a significant decrease in productivity due to the conflicts mentioned above.

Mitigation Measures

5. Soils Engineering Reports (including but not limited to engineering characteristics of the soil, recommendations for design of improvements and potential for erosion) should be required for developments in areas of moderate to high shrink-swell potential.
6. Development within the planning area should be contiguous to the City to insure that no agricultural "islands" are created.

2.4 Hydrology

Surface Hydrology

The Salinas Valley is enclosed on the northwest and southeast by the Sierra de Salinas and the Gabilan Mountains, respectively. Precipitation drains downward into the valley from the slopes of the surrounding mountains and from the head of the valley. The Salinas River, located approximately 3 miles east of the City of Greenfield, is the main drainage of the valley. It is approximately 155 miles in length and is the largest submerged river in the United States. The principal tributaries of the Salinas River are the Arroyo Seco, Nacimiento and San Antonio Rivers (which drain the Santa Lucia Mountains) and the San Lorenzo River (which flows from the Gabilan Mountains). Water flows from the Salinas River into the Pacific Ocean via Monterey Bay.

Locally, the Arroyo Seco River drains the eastern face of the Sierra de Salinas Mountains. Local drainage patterns are identified in Map 10. These drainage systems have constructed the alluvial fan deposits near the mouths of the streams and are noticeable when observed from the eastern face of the Gabilan Mountains.

Appendix D contains maps which illustrate areas that are subject to periodic flooding, which includes a portion of the planning area located to the west of the U.S. Highway 101. Another potential flood hazard would occur with the failure of either Nacimiento Reservoir in San Luis Obispo County, 40 miles southwest, or the San Antonio Reservoir, 30 miles southwest of the Planning Area. This potential has been deemed to be a low risk hazard. However, if a failure were to occur due to seismic activity, the City of Greenfield would be affected to only a small degree under most conditions.[12] The potential flood line due to dam failure is presented in Map 10. It has been estimated that travel time of a peak flood due to dam failure would be 14 hours from San Antonio Dam and 15 hours from Nacimiento Reservoir.[13]

Impact

Construction within the Planning Area will result in the addition of impervious material, which will increase surface runoff and the potential for erosion in the Greenfield area through short term soil disturbances from urban development.

Mitigation Measures

7. Drainage Plans should be prepared for major developments, incorporating techniques contained in AMBAG's Water Quality Plan. These techniques include, but are not limited to, permeable paving, drywells for roof runoff, recharge/detention ponds, et cetera. The Plan should be approved by the City Engineers and the U.S. Soil Conservation Service prior to any grading and/or development. In order to minimize drainage and erosion problems, it is desirable to maintain runoff at near pre-development levels.
8. A landscape program shall be required as a part of all new development in the Greenfield Planning Area.

Groundwater Resources

The Greenfield Planning Area is located within the Salinas Groundwater sub-basin, which comprises the majority of the Salinas Valley. The primary water-bearing formations are unconsolidated and semi-consolidated deposits that make up the alluvium, Aromas Sand, and the Pleistocene and Pliocene Paso Robles Formation. They are probably several thousand feet thick in the center of the Valley.

Groundwater movement is generally in a down-valley direction toward Monterey Bay. Recharge of groundwater occurs from four primary sources: 1) precipitation; 2) seepage from the Salinas River; 3) underflow from the area up-valley from Gonzales; and 4) irrigation return flow. Runoff from the Nacimiento and San Antonio Reservoirs is released when conditions for groundwater recharge are favorable.

Program 10: Land designated on the Land Use Plan Map as "Residential Reserves" and in agricultural production should not be converted to residential uses until the following findings are made: that development of the land will contribute to the establishment of a stable urban limit; and that 90% of the land designated in the City for residential uses has been developed.

The City Planning Area currently contains approximately 700 acres of land in agricultural use. Program 10 calls attention to some of the agricultural lands and the necessity that they remain in agricultural use until such time as demand increases for further City expansion. The agricultural lands, designated as Residential Reserve by the Land Use Plan Map, are those lands currently in productive agricultural use, but which one day may be needed for further residential expansion. This designation recognizes the land development potential of the areas, but also enforces the City goal of an orderly and planned development pattern by not allowing development of these areas to occur until adequate need is demonstrated.

Policy D: Maintain and enhance the existing community character by developing programs which encourage a desirable community character.

Program 11: Maintain the pattern of development within the existing City; and, in undeveloped areas in and outside the City, encourage new development patterns that would allow for a residential mix by type and income.

A concern expressed by the community equal to that for preservation of valuable agricultural lands was for the retention of neighborhood character. For the most part, people like neighborhoods with single family houses and low density development. This program provides direction to retain this low density character in most areas of the City, while providing direction for a compatible mix of housing types and land uses in areas planned for development.

Program 12: Protect rural views through development regulations, landscape plans and sensitive location of buildings and public facilities.

Program 13: Identify and protect entrances to the city by recognizing and presenting urban/rural transition areas and by landscaping City entrances in a manner that would be attractive to passersby and would not adversely affect the economic development of the area.

Programs 12, 13 and 14 apply to entrances to the City along El Camino Real. They recognize the importance of this roadway as a "Gateway to Greenfield". These programs will improve the appearance of the Highway, thereby promoting existing commercial uses and preserving the rural/urban transition area.

Program 14: Develop a design overlay zone which would be used along sensitive areas to implement landscape and setback requirements and architectural review.

Program 14 specifically applies to the proposed scenic highway along Oak Avenue and can be used for this sensitive area. The program is intended to protect the rural character along this roadway while enhancing the general livability of the area.

The Salinas Subbasin is divided into 3 main hydrologic units, which are illustrated in Map 11:[14]

- a. The Eastside area, located along the east side of the Salinas Valley, extending along the western hills of the Gabilan Range to approximately the boundary of U.S. Highway 101 from Gonzales to north of Salinas. Groundwater recharge in this area occurs from percolation from small streams that flow from the Gabilan Ranges and percolation in the Salinas River. Some recharge occurs from rainfall, but to a lesser extent.
- b. The Pressure area, extending westward from the Eastside area to the Salinas River, covering a width of approximately 4.75 miles. It runs north from Gonzales to north of Salinas. The clay layers of these aquifers prevent recharge from direct precipitation or from the Salinas River Channel. Groundwater recharge is supplied primarily from the Forebay Area, located to the south.
- c. The Forebay area covers the western half of the Salinas Valley, extending from Gonzales to south of Greenfield. Groundwater recharge from this area is supplied mainly by aquifers located south of Gonzales between the cities of Soledad and Greenfield. Direct precipitation and irrigation contribute a very small percentage of groundwater recharge.[15]

The City of Greenfield is located primarily within the Forebay Area. (See Map 11.) In the past, water tables in the Pressure and East Side area have dropped due to extensive pumping. Recharge in the Forebay area has increased due to water released from San Antonio and Nacimiento Dams.[16] However, an overall lowering of the water table in the Greenfield area in the future could occur as a result of overpumping. Contamination of higher quality water with inferior quality water from overlying or surrounding areas due to overdraft is possible. Further discussion of this subject follows.

Water Quality

A review of groundwater quality data for the City of Greenfield indicates that groundwater in the area which is recharged by the Salinas and Arroyo Seco Rivers is adequate, depending on the area of draw. As shown in a letter dated January 9, 1979, from John R. Longley, Jr. (at that time City Manager of Greenfield) to Irwin Hoffman (Civil Engineer for the Farmers Home Administration), water quality at the City's Oak Avenue Well and the new West Side Well varied significantly. Tests were taken at the Oak Avenue Well in September of 1976 and at the West Side Well in June of 1978. In most cases the water quality at the West Side Well, the primary water source for the City, showed considerably more than a 100% improvement over water at the Oak Avenue Well, a secondary standby well. However, at no time did either well exceed secondary drinking water standards set by the State of California.

Currently the City's vacant lands have an approximate holding capacity of 600 units, based on existing zoning. This holding capacity represents the use of the land at maximum allowable densities, including consideration for roads and public facilities. (If the current developments proposed were approved at other than the allowable maximum densities, this figure would be altered.)

The holding capacity of the city's vacant lands includes all vacant residential land, underutilized land and some commercial land based on the following breakdown of population percentages for various zoning categories.

Table 1.6
Population Distribution Breakdown by Land Use Zones for the City of Greenfield

ZONES	R-1	R-2	R-3	R-4	C-1	C-2	H-C	TOTAL
Population	1701	618	598	178	48	150	93	3386
% of Population	50.23%	18.25%	17.66%	5.25%	1.42%	4.43%	2.75%	100%

Source: 1976 Special Census Figures.

If population growth occurs at the historical annual average growth rate for Greenfield (5%), space for approximately 676 units will be needed by the year 1990. The possibility that future population might exceed the holding capacity can be prevented in the years to come through a gradual decrease in growth rate, through the approval of well-designed and substantial housing or selected annexations from the land within the Planning Area boundaries.

The Land Use Plan Map, together with the General Plan Policies, provide guidance for allocation of the vacant land area within the Planning Area boundaries proposed for residential use.

The Land Use Plan Map indicates areas suitable for future residential development, and the desirable intensity of that development based on the provision of adequate housing to meet the needs of the future projected population.

Program 16: Use specific plans and planned community development regulations to define land use policy and to encourage residential development sensitive to surrounding uses.

Specific plans and planned unit development regulations can sensitively and efficiently guide residential development. Such approaches to project review can give the City and developer a unique opportunity to coordinate design guidelines for development while assuring an adequate provision of public services.

Policy F: Enhance the livability of residential areas through land use regulations and the provision of public facilities and services to meet the needs of each neighborhood area within the City.

Policy F is an expression of City intent to maintain the character of the City's neighborhoods and to improve the quality of services to all areas within the City.

Program 17: The scattered siting of mobile homes throughout the City should be discouraged by the zoning ordinance. A combining district including mobile homes may be added to the zoning ordinance, and could be applied to various areas throughout the City, which concentrate mobile-type subdivisions in certain areas, and at the specified density of the areas.

This program encourages mobile-type home subdivisions to be concentrated in designated areas of the City, in keeping with the desire of the residents to maintain the neighborhood character of Greenfield. While the locating of single mobile homes throughout the City should not be forbidden, it is more desirable to concentrate their locations in a subdivision-type pattern, promoting a neighborhood character.

The phasing of public facilities and improvements is the primary public investment influencing the type and character of residential development within the City. The residential environment, being where most people satisfy their basic need for food, shelter and community, is the most important aspect of city life. Therefore the availability of public services and facilities and their adequate timing and phasing provide the basic framework for a high quality of residential life.

The following programs supply the City with clear direction to ensure that adequate public facilities and services will be available to new and existing housing and that a high quality of residential life will be provided in the City of Greenfield.

Program 18: Provide for adequate park space and facilities in Greenfield to serve the needs of all segments of the community.

Existing and proposed parks are illustrated in the Land Use Plan Map. The provision of adequate parkland space in Greenfield has been a prime concern of residents during the General Plan revision process. The Citizens of Greenfield have expressed a desire to see more parks in their area, large enough to serve many segments of the community.

Program 19: Acquire parkland space through developer in-lieu fees required from private landowners.

Program 20: Encourage low maintenance type parks and open space.

Programs 18 and 19 reflect the City's difficulty in the past in funding the acquisition of park space and park improvements. Through these programs, the city's policy of requiring private investors to fund acquisition of park space is reinforced. By encouraging low maintenance park facilities, the problem of unavailability of funding for the necessary improvements is addressed.

Program 21: With new development, require developers to share with the community the responsibility of ensuring that adequate public facilities will be provided to serve increased community need.

Program 22: Reduce through traffic on local neighborhood streets and maintain those streets for strictly residential traffic.

Impact

No significant impact will be incurred upon native vegetation by implementation of the plan.

Mitigation Measures

None are proposed.

Wildlife

There are no significant wildlife habitat sites within the Planning Area.

Impact

Any remaining natural wildlife will be eliminated or displaced on those portions of the Planning Area intended for development. However, because these lands also have been used for agriculture, the most significant impacts occurred when the land originally was converted to agricultural uses early in this century.

Remaining native animal species probably will be displaced as development progresses.

Mitigation Measures

12. None are proposed.

2.6 Aesthetic Considerations

Viewshed

The gradual implementation of this land use plan will result in clear views of projected urban development from the existing urbanized portion of Greenfield. The elevation of the City of Greenfield is between approximately 290 and 310 feet above sea level. Much of the urban development which will occur to the west will be at elevations between 295 and 305 feet.

The minimal change in elevation, in viewshed terms, does not allow any significant elevated views to the proposed improvements. Manmade structures, including Highway 101 and the Santa Lucia Shopping Center, as well as many single family homes, limit the existing viewshed area.

Projected urban development in Greenfield will be visible to travelers along U.S. Highway 101, as well as to residents of the City of Greenfield. The area of industrial expansion proposed to the west and to the south will, for the most part, be viewed by residents of Greenfield. The area of industrial expansion located along Elm Avenue will be visible from Highway 101. In addition, Elm and Oak Avenues within the planning area have been recommended for scenic road designations, although no official designations have been made.

Impact

Development pursuant to this plan will cause a visual impact for those traveling on U.S. Highway 101.

Mitigation Measures

13. All new development in the City or its planning area should be subject to design control in order that development will be integrated with the surrounding viewshed, especially within the proposed scenic road corridors.
14. Units in major developments should be painted in unobtrusive colors to alleviate significant visual impact.
15. Landscape plans, especially for industrial projects, should be undertaken to alleviate adverse visual impacts, subject to review by the Planning Commission, City of Greenfield.

Noise

There are two major noise generators in the Greenfield area: automobile and truck traffic. Automobile and truck noise is concentrated along Highway 101 and the major arterials. Truck traffic is concentrated in the industrial and agricultural areas located near the Highway.

The Noise Element for the City of Greenfield presents estimated noise contours for the City in 1995. These are illustrated in Map 12. By comparing land use type and noise compatibility levels, one can provide standards to be used for development of various land uses and for determining whether special noise attenuation measures should be provided in proposed developments. Table 7 shows the compatibility of existing and proposed land uses with present and projected noise levels, as presented in the City's Noise Element.

Based on these guidelines, portions of the planning area will exceed 65 decibels (dba) for residential development. Generally, this area occurs within 350 feet of Highway 101. The existing development along Highway 101 is subject to more noise than other portions of the City. Areas for future commercial and industrial development are within the recommended decibel range for these uses.

Impact

As potential traffic-related noise problems are created within the City's expansion area, some future residential development will be subject to noise levels exceeding the recommended 65 dbA limit. This is especially true for the area bordering Highway 101.

Future development will create temporary construction noise. Construction is considered to be a short term secondary noise level producer. During the construction period, noise levels will be increased over the levels presently emanating from the proposed expansion area.

Cypress Ave

Pine Ave

Greenfield General Plan Planning Area

Cherry Ave

Walnut Ave

Apple Ave

Oak Ave

Elm Ave

LEGEND

1974 dBA L10

0 1500
Scale in feet

Greenfield General Plan E.I.R.
City Noise Contours
Map 12

Source: City of Greenfield — Noise Element

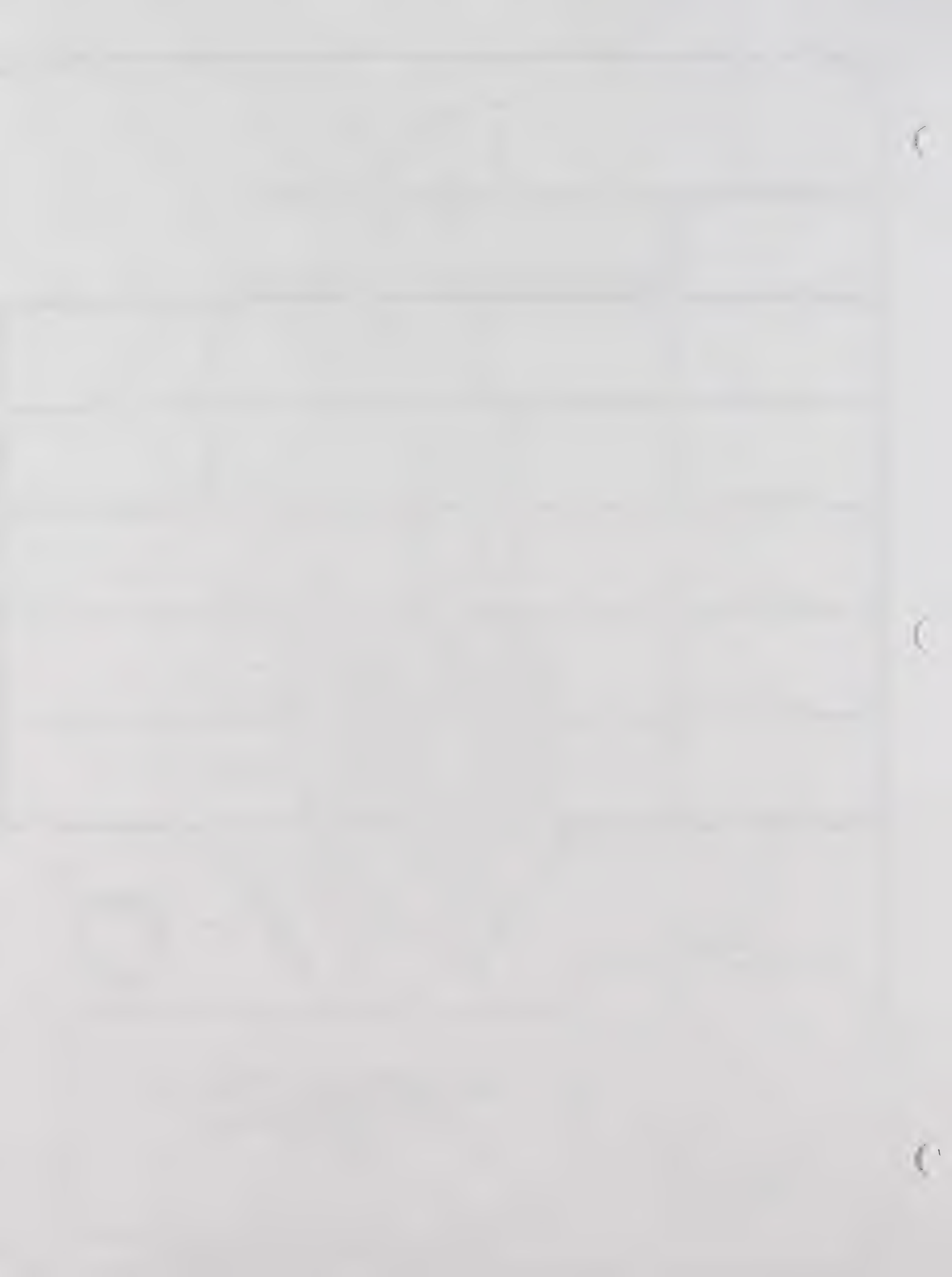


Table 7
Exterior Land Use/Noise Compatibility Levels

Generalized Land Use	Exterior L10* Decibel (dBA) Range	General Land Use Recommendation**
Residential & Institutional	Less than 65 dBA	A
	Greater than 65 dBA	B
Commercial & Industrial	Less than 75 dBA	A
	Greater than 75 dBA	B
Parks and Open Space	Less than 65 dBA	A
	Greater than 65 dBA	C

*L10 = Level not to be exceeded more than 10 percent of the loudest hour.

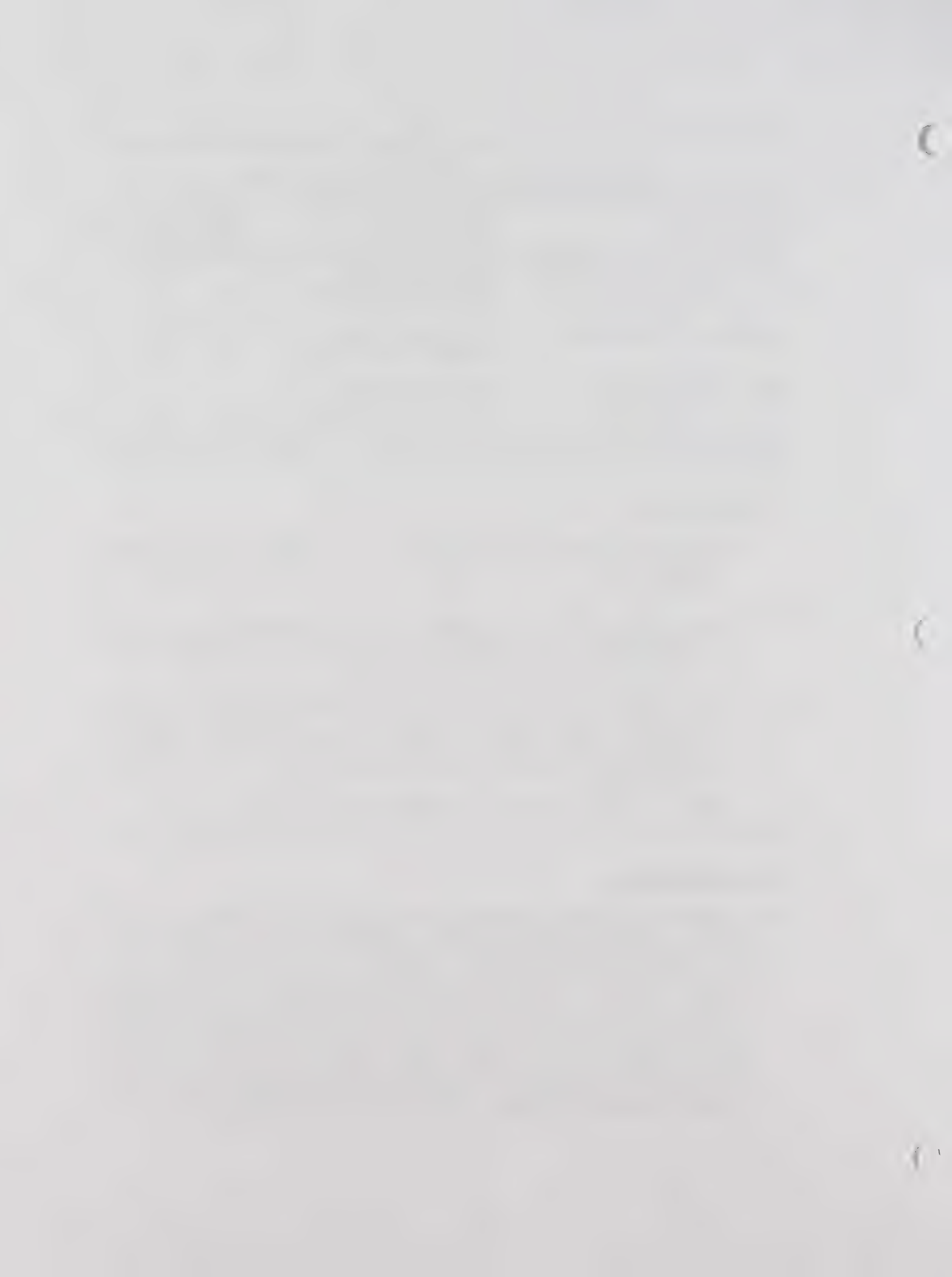
**Recommendation:

- A = New construction or development will be subject to no adverse noise impacts and will require no special noise attenuation features.
- B = New construction or development should be undertaken only after an analysis of noise reduction requirements is made and needed noise attenuation features are included in the design.
- C = New building construction involving concentrations of people (spectator sports and some recreational facilities) generally should be avoided unless an analysis is made of noise reduction requirements and needed noise attenuation features are included in the design.

Source: George S. Nolte, Noise Element of the General Plan.

Mitigation Measures

16. As potential traffic-related noise problems are created within the City's expansion areas, project applicants will be required, as part of the planning process, to verify that noise impacts will not be significant. The City's Noise Element shall be used as a guideline. If noise is found to be of significant concern, noise insulation or buffers shall be required. Mitigations include concrete block subdivision walls, additional setbacks, landscaping, double pane windows and orientation of buildings away from noise sources. Most residences have a noise reduction between 15 and 30 dbA, with no special noise control provisions, depending upon whether the windows are open or closed. This is presented in Table 8.



Practical building exterior noise control techniques are available to improve the noise reduction of typical construction by 10 to 20 dbA. Such techniques which could be used generally involve one or more of the following:

- a) use of heavy, weatherstripped exterior doors;
- b) fixed, sealed double windows.
- c) elimination or baffling of openings through walls, including wall air conditioning, mail slots, attic and crawl space, et cetera; and addition of noise insulation blankets between wall layers;
- d) addition of materials to certain wall and ceiling surfaces, especially beamed ceilings where attics exist.

Table 8
Noise Reduction Afforded by Common Building Construction
Assuming No Special Noise Control Provisions

Construction Type	Typical Occupancy	General Description	Range of Noise Reduction, dbA
1	Residential, commercial, schools.	Wood framing. Exterior stucco or wood sheathing. Interior drywall or plaster. Sliding glass windows. Windows partially open.	15-20
2	Same as 1, above.	Same as 1, above, but windows closed.	25-30
3	Commercial, schools.	Same as 1, above, but windows are fixed 1/4" plate glass.	30-35
4	Commercial	Steel or concrete framing. Curtain-wall or masonry exterior wall. Fixed 1/4" plate glass windows.	30-40

The range depends upon the openness of the windows, the degree of seal, and the window area involved.

Source: Noise Insulation Problems in Buildings, Paul S. Veneklasen & Associates, January 1973.

- 17. In accordance with Monterey County Standards, all construction and general servicing activities, except in an emergency, should be limited to specific hours and utilize the quietest equipment possible. The noise level during construction should be 65 dbA or below and should not exceed 8 hours in a 24 hour period.

2.7 Traffic and Circulation

Access to the City of Greenfield is provided by U.S. Highway 101, which runs north-south and transects the City. El Camino Real (Old Highway 101), to the west of Highway 101, functions as an arterial road. The proposed Circulation Plan is shown on Map 13. Within the planning area, El Camino Real will continue to serve as an arterial and Elm also is designated as such. In the industrial expansion area to the southeast of the City, access will be provided by Elm Avenue. As development occurs within this area, an existing public right-of-way could be developed as a road to facilitate traffic flow.

Impact

Full implementation of the plan could generate as much as 33,000 additional vehicle trips per day in the Greenfield area. This includes vehicle trips generated by residential, commercial and industrial uses. At this time, however, specific traffic impacts are unknown.

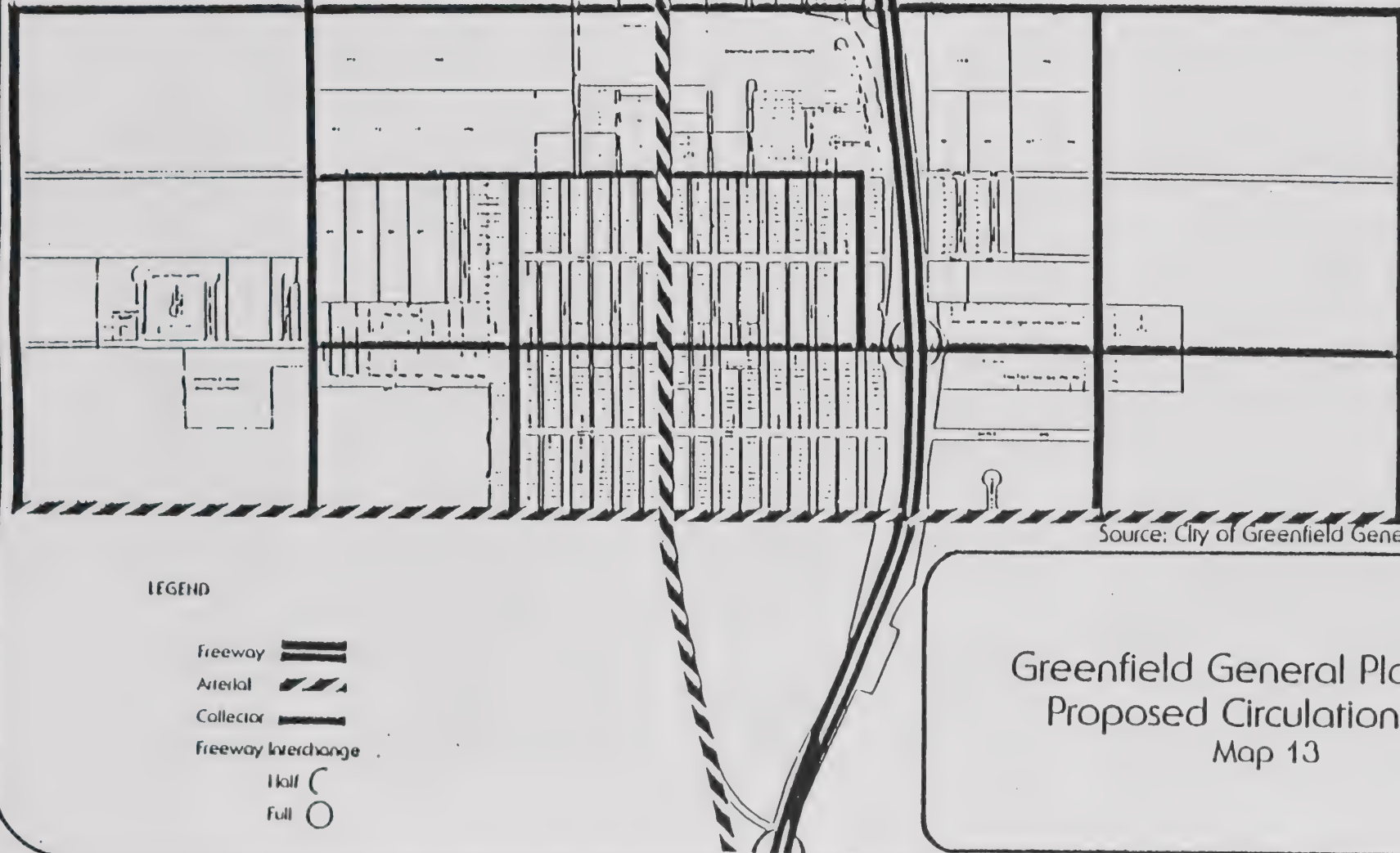
Mitigation Measures

18. Evaluate number of vehicle trips generated and road capacities during the environmental review process for future development projects, so traffic flows can be monitored and road improvements can be planned for.
19. The City Engineer shall review all circulation plans for proposed development projects. Consideration shall be given to road widths, adequate bedding (to accommodate large trucks), adequate loading areas and turning radius, parking spaces adequate for employees/visitors and large trucks, and adequate utility strips to accommodate future utility extensions.
20. All roads should comply with the City of Greenfield adopted street standards. Street improvements on all roads constructed should include:
 - a) curbs, gutters and sidewalks;
 - b) parallel curb parking lanes;
 - c) stop signs at all blind intersections and intersections.
 - d) road widths designed to meet City standards.
21. Structural design control and site and street landscape planning should be considered for proposed projects in the areas proposed as scenic routes.



0 1650
Scale in Feet

Greenfield General Plan Planning Area



Source: City of Greenfield General Plan

Greenfield General Plan E.I.R.
Proposed Circulation Plan
Map 13



2.8 Air Quality

The central portion of the Salinas Valley is considered a part of the same air basin as all of the coastal areas of Monterey County.[19] It is identified as the North Central Coast Air Basin. Two types of climate occur in the valley: 1) marine climate, characterized by cool, moist ocean air; and 2) continental climate, which is characterized by warm air rising from the land. The mouth of the valley is predominantly within the marine climate zone, while the central and southern valley is within both types. The two factors that contribute most to air quality problems within the valley are: 1) wind pattern, produced by the interaction of the two climate zones, with the resultant frequent formation of an inversion layer; and 2) the valley's topography, with its tendency to contain air masses. These two factors, acting separately or in conjunction with one another, can create unique weather patterns with a potential for severe accumulations of atmospheric pollutants.[20]

The extent of dispersion of materials admitted into the atmosphere is primarily a function of the wind and inversion existing conditions. Inversion layers are present in the valley for a significant part of the year, most frequently during the spring, summer and fall months. The on-flow winds that frequently move up the valley tend to prevent the dispersion of an inversion layer out through the mouth of the valley. These winds, therefore, have the potential to move pollutants up the valley, where they can accumulate under the inversion layer.[21]

Motor vehicles are the largest source of gaseous pollutants in the Salinas Valley. Carbon monoxide, nitrogen oxides and hydrocarbons comprise the basic category of air pollutants emitted from automobiles. Nitrogen oxides and hydrocarbons produce photochemical smog under the action of sunlight.[22] Though the emissions from a particular car do not seem exorbitant, it is the volume which accounts for the pollution potential.

Under the federal Prevention of Significant Deterioration Program (PSD), areas which maintain federal air quality standards currently are being classified. Areas which presently exceed standards, designated as Non-Attainment Areas, are required to prepare a Non-Attainment Plan.[23] Monterey County is included within a Non-Attainment Area. A Non-Attainment Plan has been prepared by the Association of Monterey Bay Area Governments (AMBAG); it proposes general measures regarding traffic flow and transit services which should enable this District to meet Federal standards by 1982. In addition, general policies pertaining to mobile-source and land-use controls are suggested. Although there are no specific policies for South Monterey County, the plan recommends that residential developments be reviewed by AMBAG according to the A95 review process.[24]

The North Central Coast Air Basin has been designated as non-attainment for one of five "criteria" pollutants — that of oxidants. The National Ambient Air Quality Standard for oxidants (1-hr.) is 0.12 ppm (parts per million) ozone, as revised by the Environmental Protection Agency (EPA). The value used in designating Monterey County was 0.16 ppm, which later was revised to 0.14 ppm as the appropriate design value.

Table 9 identifies the average emissions produced by mobile sources in Monterey County during 1977. A 50% reduction of total allowable emissions is the goal for 1982.

Table 9
Average Emission of Pollutants - 1977
Total organic gases* - Tons per day
Monterey County

Mobile Sources	Monterey County
A. On-Road Vehicles	18.1
B. Off-Road Vehicles	
Jet aircraft	.2
Piston aircraft	.5
Railroads	.8
Ships	--
Other off-road	3.1
Total mobile sources	22.7

*Total organic gases, for practical purposes, is the same as hydrocarbons.

Impact

The proposed plan will contribute to the following potential impacts:

- a) Cumulative increase in existing levels of air pollutants.
- b) Incremental degradation of air quality in the Salinas Valley.

Since the Salinas Valley is susceptible to air quality degradation, the proposed plan would contribute to a cumulative increase in existing levels of air pollutants. This would result from automobile emissions as well as particulates emitted from fireplaces. Although pollutant levels generated by the plan would be insignificant relative to the entire County, the plan, in conjunction with existing and future development in the Greenfield area, will result in an incremental degradation of air quality, at least in the short term. In the long term, automotive emission control devices may result in overall reduction of emissions per automobile.

A combined short and potentially long term effect on the North Central Coast Region is that of energy shortages. A cut-back in energy supplies to the area has the potential to reduce the overall vehicle miles traveled and to create an incentive for use of public transit.

Although discussion of air quality most often focuses on automobiles and their air pollutants, there are other sources of pollution. Any type of burning, such as wildfires, brush burning, and fireplaces, will add particulate material to the atmosphere. Outside incinerators no longer are

allowed, but fireplaces remain a potential source, for often they leave a visible haze in the atmosphere and commonly are used throughout the northern valley to burn trash. Agricultural activities also are a significant source of particulate matter. In addition, construction sites contribute to air quality problems because they often create large quantities of dust.

Condensation nuclei in the atmosphere such as dust, salt particles from the ocean, and particulate matter from car exhaust and fires provide a sub-strata for the formation of smog. The concentrations in the valley are mostly from human activity; they correlate with agricultural and motor vehicle activity.

Mitigation Measures

22. As specified in the Air Quality Maintenance Plan, specific project plans should be reviewed by AMEAG.
23. Each industrial development proposal shall be examined by the City Manager and City Engineer for air quality degradation potential. If a potential air quality problem exists, proper mitigations to alleviate it must be undertaken.
24. Improvement plans for new developments should include the specific plan and implementation schedule of measures for the prevention and control of dust during and immediately following construction, and the ultimate control of wind-blown dust. Specific mitigating measures should include landscape plans designed to control dust by providing barrier vegetation for development within the Greenfield Planning Area. The cost of the required landscaping should be borne by the developer and should be subject to approval by the Planning Director.
25. Bike and foot paths should be implemented in conjunction with plan development in order to encourage a more energy-efficient means of transportation within the City.
26. The use of public transit or energy-free transportation modes as a substitute for private automobile trips is the only practical means of reducing vehicle miles traveled. Future project plans therefore should include future planning for public transit access and loading areas, if deemed significant and feasible by the City Council, City of Greenfield.

2.9 Public Services and Utilities

Water Service

The City of Greenfield presently obtains its water supply from groundwater through two principal wells. The primary well is a result of the West Side Water Project, funded through the Farmers Home Administration. This well is located near Fourteenth Street at the extension of Cherry Street. The West Side Well has a 16-inch transmission line that runs

directly to the main water tank, adjacent to the original well between Eleventh and Twelfth Streets on Oak Avenue. The present available water capacity for the City of Greenfield is approximately 1.6 million gallons per day. The water quality of this well is adequate.[26] Another well is located on Oak Avenue between Eleventh and Twelfth Streets and is a standby well. The quality of the water obtained from this well is marginal in that it exceeds the recommended concentrations for total dissolved solids, hardness and sodium, as established by the U.S. Public Health Service.[27] However, the concentrations of all constituents measures are below mandatory standards set by the U.S. Public Health Service. Two other standby wells are available, with quality essentially the same for one and considerably lower for the other.

The municipal water system of the City of Greenfield services 1,008 metered connections and 12 unmetered commercial connections. Water is transported by a series of water mains within the Greenfield Planning Area, varying in size from 4" to 8". The majority of the undeveloped areas of the Greenfield Planning Area currently are not served by water mains.

A Proposed Water System Master Plan for the City of Greenfield has been developed by the City Engineer. This plan details future improvements to the existing water system for anticipated city expansion. The plan has been adopted by the City of Greenfield; however, the plan is conceptual at this stage because no specific implementation and/or funding scheduling has been developed.

The Proposed Greenfield Water System Master Plan is comprised of approximately 55,000 feet of 12-inch water mains and between 1,250,000 and 1,500,000 gallons of additional water storage capacity. Two tanks which are included as part of this Master Plan would provide the storage capacity. One tank would be located at the existing well site at Cherry and Fourteenth Streets west of the City. Though the site is not within the existing city limits, the city presently owns this land and operates its principal well on the site. This tank would have a capacity of one million gallons and would require a booster pump or elevation to maintain the desired water pressure for fire flow (20 psi [pounds per square inch]). More pressure would be needed for household flows.

The other tank proposed within the Plan would have between 250,000 and 500,000 gallons of water storage. This tank would be located north of Walnut Avenue between El Camino and Tenth Street. A booster pump or elevation would also be needed to maintain desired water pressures. This site is not presently within the city limits of Greenfield. Map 14 illustrates the proposed Water System Master Plan for the City of Greenfield.[28]

The proposed Water System Master Plan would include the construction of two storage tanks, the replacement of existing 4", 6" and 8" water lines with 12" water lines, and the planning for 12" water lines in presently undeveloped areas.

Implementation of the proposed Water System Master Plan, detailing the future improvements to the City's water system, would serve the following objectives:

Greenfield General Plan E.I.R.
Proposed Water Systems Master Plan
Map 14

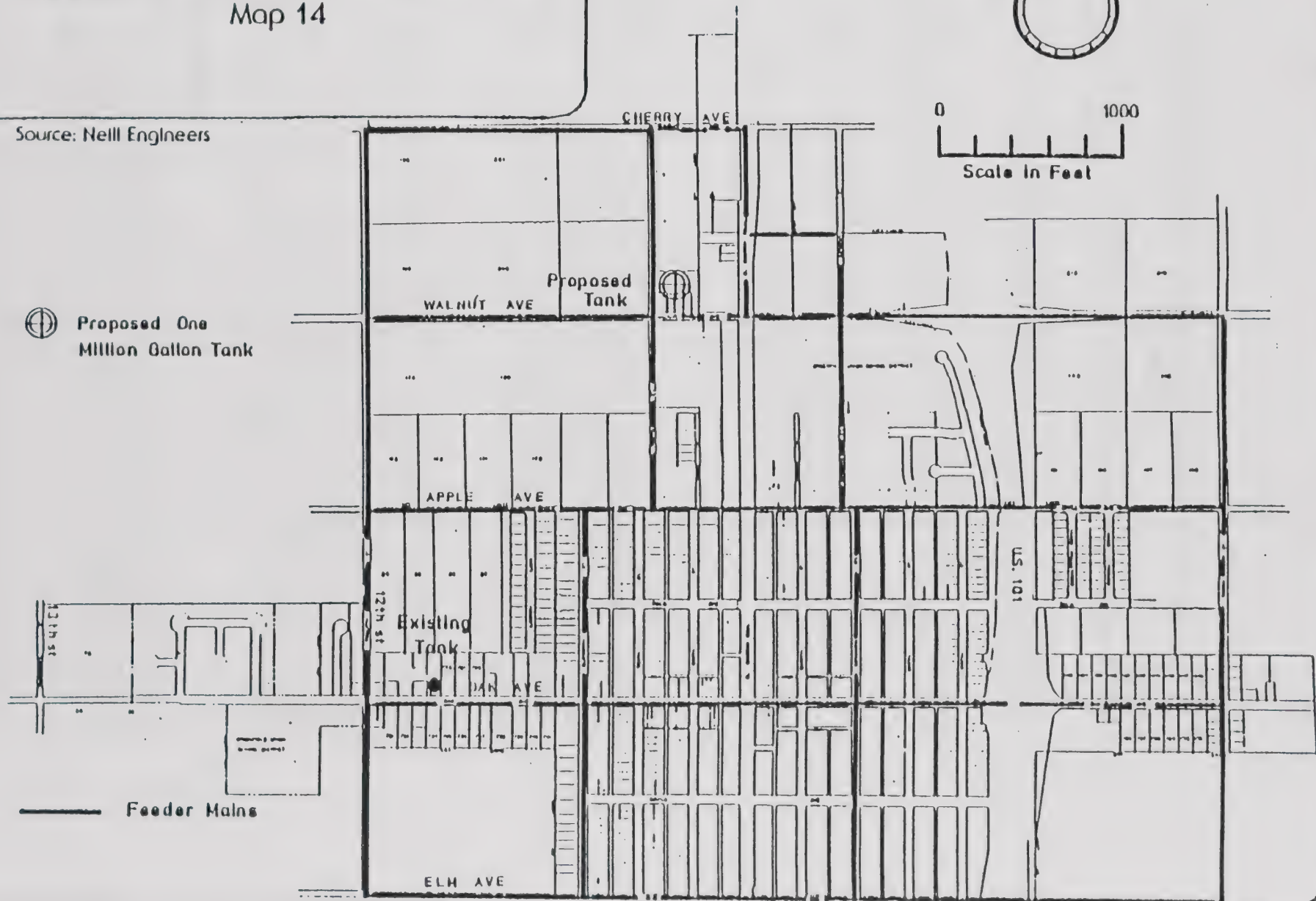
Source: Neill Engineers



0 1000
Scale in Feet



Proposed One
Million Gallon Tank



- a. Fire protection would be improved greatly with the additional storage capacity and larger (12-inch) mains.
- b. An adequate circulating water system would stabilize water pressure throughout the City.
- c. A planning tool would be established whereby developers would be required to construct 12-inch lines as a condition of project development.
- d. Although there is not a serious water quality problem, additional tank storage would alleviate the problem of milky tap water possibly caused by carbon dioxide (CO₂). [29]

It is unknown at this time if and when a new well will be needed. The existing well is adequate for present City needs. However, future city growth, changes in water quality, and wear on the existing structure inevitably will require construction of a new well. No time frame or phasing has been established as yet for implementation of the Water System Master Plan.

Impact

Implementation of the Proposed Land Use Plan at full buildout could create approximately 1,000 additional dwelling units within the Greenfield General Plan Planning area, 30 additional acres of Commercial uses and 50 additional acres of Industrial uses. Average daily consumption of water could be increased by an additional 300,000 gallons per day by 1990, and 500,000 by the year 2000. This Plan, upon implementation, will utilize more water per day than the system is presently capable of storing.

Between the months of May and December of 1977, the City of Greenfield consumed 124,752,000 gallons of water. At that time the population was 3,386. The average city usage per day during that eight month period was 509,792 gallons. Development within the Planning Area will increase the total average daily use within the City of Greenfield by approximately 100%. No water usage figures are currently available for the post-1977 time period. It should be mentioned, however, that a major population increase occurred in the 1978-79 year, which would add significantly to the aforementioned 1977 water usage figures.

Mitigation Measures

27. As Greenfield's population increases and development occurs within the City, developers are required to install water mains on-site and off-site to serve proposed projects in accordance with plans and specifications submitted to and approved by the City Engineer and City Manager of the City of Greenfield.
28. Within a Five Year Capital Improvement Plan, the City should plan for expanding the City's current water storage capacity, as detailed in the Water System's Master Plan for the City of Greenfield.

29. New development should meet fire flow requirements for commercial and residential uses.
30. Require the installation of low water consuming landscaping (preferably native species) in developments in the Greenfield Planning Area.
31. Existing agricultural wells, previously used for agriculture in the planning area, should be examined and, if deemed usable for human consumption, shall be connected to the City's water system as developments occur.
32. The following residential interior water saving devices should be implemented into all residential subdivisions:

	Added Cost per Unit	Water Savings as a % of Interior Use
Low flush toilets	0-10	18
Low flow shower heads	0-5	12
Low flow kitchen & lavatory faucets	0-5	2
Pressure reducing valves	0-25	5
Insulated hot water lines (per foot of line)	0.50-1.00	4
Low water use clothes washers	20-30	5
Low water use dishwashers	0	4
Estimated Maximum Total	\$75.00**	46% savings

**Excludes insulated hot water lines.

Sewage Disposal

The City of Greenfield's wastewater treatment facility is located east of Greenfield on city-owned property at approximately 36°20'30"N. latitude and 121°13'30"W. longitude. The facility is considered to be a primary treatment plant, consisting of comminutor, pre-treatment facility, sedimentation basin, unheated digester (aerobic), oxidation/percolation ponds for treated effluent disposal and three sludge drawing beds. The primary treatment facility capacity equals approximately 500,000 gallons per day average flow, adequate for the expected 1986 service area population of 6,350.[30] The plan presently is running at 265,000 gpd (gallons per day). This leaves in the neighborhood of 235,000 gpd for the facility's expansion within the Greenfield service area.[31] The City of Greenfield plans to expand the present pond capacity to an estimated 500,000 gallons, according to the Planning Director of the City of Greenfield. The current pond capacity of the sewage treatment plant is 260,000 gallons.

The sewer Interceptor, a 12-inch pipeline that carries wastewater to the main treatment plant, has a capacity of 1.1 million gpd from Second Avenue to the treatment plant, with a peak hour load of .7 mgd.[32]

The sewer lines currently serving the City of Greenfield consist of 6", 8" and 12" lines.

Impact

The proposed Land Use Plan could create an estimated average additional flow of 200,000 gpd to the City's sewage facilities by 1990 and 350,000 gpd by the year 2000. This would significantly increase existing flows. The treatment plant would be forced to approximately 50% above its current capacity.

Mitigation Measures

33. Within the City's Five Year Capital Improvement Program, the City should plan for sewage treatment plant improvements and sewer line improvements. The proposed improvements should be recommended by the City Engineer to ensure adequate sewer capacity for the Planning Area.
34. Once the treatment plant has reached its capacity, no sewer hook-ups should take place for any development until the sewage treatment plant can accommodate increased sewage flows.
35. Industrial wastes shall be pre-treated prior to entering the treatment plant.
36. Individual developers shall install complete and properly-sized sewer lines, as determined by the City Engineer,

Fire Protection

Fire protection is provided by a volunteer fire district for the Greenfield area. The district extends from Lagomarsino Avenue to the south, the Salinas River to the east, Arroyo Seco River to the west, and the U.S. Forest Service Fire Protection Substation to the north, approximately halfway between Greenfield and Soledad. The district has a mutual aid agreement with the U.S. Forest Service District Office located in King City, California.[33]

The fire protection service in Greenfield consists of 21 volunteer firepersons, 2 1,000-gallon pumpers and 1 rescue truck with a 3,090-gallon pump capacity. The station is located near the corner of Oak Avenue and El Camino Real in the City of Greenfield.

The hazard from wildland and structural fire is directly related to several factors: the various combinations of vegetative cover; the summer climate conditions; the prevailing slope; and the type and intensity of land use. With agricultural land completely surrounding the City of Greenfield, it becomes an island protected from wildland fire. Because

slope is low and vegetation is light, weather is the only factor that creates the area's susceptibility to wildland fire.

Impact

Full Implementation of the proposed Plan may have a significant impact upon the fire department. The Plan will add to the area people who smoke and children who might be careless with matches. This has a cumulative effect on the region by increasing fire potential in the surrounding vicinity. The Fire Department's equipment should be adequate to handle the projected population growth.[34]

Mitigation Measures

37. Access Roads

- a. Roads shall be hard surface material capable of supporting a weight of 16 tons.
- b. Minimum width of 12 feet per Lane.
- c. All buildings, parts of buildings or other obstructions (including trees or wire) over access driveways shall have not less than 12 feet of vertical clearance for finished driveway surface.
- d. All turns shall have a minimum turning radius of 39 feet.

38. Access to Buildings

- a. Every single story building should be located so that the farthest point from an access road capable of being used by fire apparatus shall not exceed 150 feet. This distance shall be measured around the perimeter of the building and shall take into consideration any natural or manmade barriers such as trees, shrubs, fences, et cetera.

39. On-Site Fire Hydrants

- a. It is the responsibility of the developer to have a system engineered to meet the requirements of the City of Soledad.
- b. The type of hydrants shall be approved by the Fire Chief, City of Soledad.
- c. The hydrant system should be on an 8-inch loop system.
- d. If a public hydrant is not within 500 feet of the farthest building under construction, on-site hydrants should be provided before construction begins.
- e. The required fire flow must always be capable of being taken from any one hydrant in the system with a residual pressure of not less than 20 pounds per square inch.
- f. All fire flow requirements applicable to specific uses such as Residential, Commercial and Industrial Development shall be met.
- g. Under special conditions, the City of Soledad may require a larger minimum size of pipeline in certain locations (i.e., for the Commercial uses).
- h. Normal operating pressure shall not be less than 25 pounds per square inch gauge (PSIG) or more than 125 PSIG, except that during periods of peak hourly maximum pressure, the pressure may vary between 20 PSIG and 150 PSIG.

40. Site Plans

- a. Specific site plans for future developments showing the location of all buildings shall be provided to the Fire Department. These plans shall include the following:
 - 1) Size of mains supplying on-site hydrants, including locations of all valves, meters and connections to mains or mains.
 - 2) Location of on-site hydrants.
 - 3) Numbering system of development.

Police Protection

Police service is provided by the City of Greenfield from their station located near the corner of Oak Avenue and El Camino Real, within the City of Greenfield. The department consists of seven official sworn personnel, including a chief, captain, sergeant, corporal and four officers. The department has four patrol vehicles and includes a canine unit. Presently there are three working shifts for the department; they are 7 am to 3 pm, 3 pm to 11 pm and 11 pm to 7 am. There is at least one man on each shift, with the captain and chief present during the day, and a night supervisor between the hours of 6:30 pm and 2:30 am.

Impact

Due to the relatively large population-generating capacity of the proposed Land Use Plan, the impact upon the resources of the City of Greenfield Police Department will be significant. It will generate a need for at least one additional officer per 500 new residents. Assuming 9,260 persons by the Year 2000, 10 additional officers will be required to accommodate additional traffic and general services provided by the department. The addition of these officers will further necessitate an increase in department office space, police services and other related spacial factors. The numerous development proposals within the planning area could put a strain on police protection, with a resulting decrease in efficiency, depending on the timing and phasing of development. This impact is particularly relevant in regard to traffic and safety concerns, as discussed in Section 2.7, Traffic and Circulation, of this Report.

Mitigation Measures

Public safety mitigations to be used in subsequent development in the Greenfield Planning Area are as follow:

41. Roadways should be of sufficient width to allow for adequate turning of emergency vehicles.
42. Front doors of all structures should have single or double cylinder dead-bolts with 1-inch throws. Viewers should be placed in front doors and small secondary locks should be placed on patio doors to prevent forcing of sliding glass doors in residential dwellings.

43. Landscaping around residential dwellings should not hide the windows or prevent access to or from windows, and all branches should be 4 to 5 feet above ground surface level. This assures a clear view for police surveillance from vehicles.
44. Adequate lighting throughout the City is necessary for crime prevention. This mitigation should be implemented through the cooperation of the City Manager, City Engineer and City Police Department.
45. Speed bumps should be incorporated into developments where deemed necessary to reduce overall traffic speed.
46. All development proposals should be reviewed by the Police Department to ensure conformance with Police Department requirements.

Schools

Development within the City of Greenfield Planning Area will generate additional children in local schools. The Children of the Planning Area will attend the following schools:

Greenfield Elementary School, K-3
Oak Avenue School, 1-3
King City High School, 9-12
Hartnell College (Junior College; set up for a two-year program)

It is anticipated that the proposed plan could add an estimated 700 children to the schools in grades K-3 and 550 children to grades 9-12.

Between the Greenfield Elementary School and Oak Avenue School, the combined capacity is approximately 1,000, with highest enrollment at 987.[35] Enrollments fluctuate to a great extent in this district due to migrant worker movements. It appeared enrollments were declining over the past few years; however, at present they seem to be on the upswing.[36] The average daily enrollment for the present school year has been 910 students.

Impact

The District will be affected strongly by the Implementation of the Land Use Plan requiring an eventual increase in staff and classroom space. The Superintendent of Schools for the Greenfield School District has commented on the difficulty of passing revenue bonds to generate the funding for school facilities. Recently there has been a trend in a number of cities to impose school impact fees on developments that create a significant impact on the capacity of the school system. Such fees are imposed on developers, implemented through an adopted ordinance, only when the development creates a serious problem in capacity on the existing school system. Such may be the case with the proposed Subdivision.

The current average number of students per classroom in the district is 31. Various systems of reorganization could feasibly raise or lower the classroom average. However, the impact of increasing the number of pupils per classroom could be that of a lower quality of education for Greenfield.

The factor of time is significant regarding this impact. If developments are approved and constructed within a short time, the school system would be filled to capacity, without adequate facilities or time to provide for the additional students.

Mitigation Measures

47. Consider implementation of development impact fees as school enrollments reach capacity. This would lessen the financial burden of providing additional portable classrooms.
48. Phase future development to allow the school system time to accommodate anticipated increases. This phasing should be written into development permits, thereby allowing a maximum number of units to be developed annually. The number of units and type and density of development should be defined further in light of current demands and future projections. Only from this definition and fiscal analysis can adequate phasing guidelines be derived.
49. Improvements including bike paths and sidewalks to existing as well as new schools should be constructed in order to reduce traffic hazards.

Parks and Recreation

Current parkland space is minimal. The City Greenfield currently has 2 small neighborhood parks within its limits — one at Fifth Street and Maple Avenue and another at Palm Avenue and Ninth Street. Additionally, open playing fields are provided within the City at the elementary school sites.

Impact

The State of California typically recommends 10 acres of park land per 1000 population. Utilizing these standards for subsequent development, the City may need an additional 5 acres of parklands at full implementation of this plan. However, because current space is minimal, more than 5 acres of space would be necessary to serve the population.

Mitigation Measures

50. Require dedication of land from private developers or in-lieu fees to be used for park acquisition and development. Future developments within the City's planning area should contribute to the development of parks.

Public Utilities

Electricity and natural gas will be supplied underground by Pacific Gas and Electric Company (PG&E), which supplies gas and electricity to customers in the Greenfield area.

Telephone Service will be supplied underground by Pacific Telephone and Telegraph Company.

Energy Conservation

Energy conservation is becoming a prime concern in many communities. Energy consumption results from three sources: energy required for residential, commercial and industrial uses; energy needed for transportation; and energy used for specific site construction. Site planning and building designs that are energy- and cost-efficient are being utilized more and more. There are several ways that energy consumption can be reduced in residential developments: through site planning, building orientation and energy conservation design and devices within residences. Building orientation with a southern exposure can provide increased opportunities for natural heating and cooling. Energy efficient building and conservation features can be used to reduce energy consumption. These techniques range from insulation to window glazing to energy efficient lighting.

Impact

Increased energy consumption will occur as a result of implementation of the Plan, although, according to PG&E, no significant impact is expected to occur.[37]

Mitigation Measures

51. All new construction must meet the latest standards for energy conservation, including both insulation and efficient utilities and heaters.
52. Energy conservation devices shall be encouraged in order to reduce energy consumption. Any combination of the following should be considered:
 - a) Insulate ceilings, floors, water heaters and pipes; weather-strip and glaze windows to reduce space heating and cooling.
 - b) Install high-pressure sodium vapor (HPSV) street lights. It has been demonstrated that a 200 watt HPSV lamp provides the same amount of light as does the commonly used 400 watt Mercury Vapor Lamp, and uses half the energy.[38]
 - c) Efficient lighting practices, including use of indirect light, use of efficient lighting fixtures and establishment of reasonable lighting criteria to prevent over-illumination.

d) Automatic control units that restrict inflow of heated air when doors and windows in room are open.

e) Glass area should be no more than 20% of the floor area.

53. Although solar energy use presently is insignificant compared with electricity and natural gas, the residential nature of most of the expansion areas presents the best opportunity for solar energy use, including incorporating passive solar heating in new buildings.

2.10 Archaeological Resources

An archaeological literature search and review of archival data was conducted by the Archaeological Regional Research Center (ARRC), located at Cabrillo College, Aptos, for the Meadows Subdivision EIR.[39] The archaeological site maps and records maintained by ARRC were checked to determine whether the subject parcel (located between Eleventh and Twelfth Avenues and Apple and Oak Avenues) previously had been examined and to review for the presence of unknown cultural resources within a 2-mile radius of the project area. This examination revealed that there are no known cultural resources within the area (an area including all of Greenfield). In fact, there are no cultural resources identified on the Greenfield 7.5 minute USGS sheet. Archaeological Resource Service (ARS) previously has surveyed an 18 acre parcel situated within the block bounded by Third and Fourth Streets between Maple and Elm Streets, on the eastern edge of the City of Greenfield,[40] and a 4.5 acre parcel situated approximately between Oak and Apple Avenues, along Twelfth Street.[41] Several additional survey projects have been conducted within the municipal limits of Greenfield.[42] These, too, have all proven negative.

Prehistoric cultural resources can be expected to occur in the vicinity of Arroyo Seco, particularly at the base of the hills on the western side of the Salinas Valley. However, due in great part to the deposition of thick deposits of windborne sand in the Salinas Valley, which tends to obscure material evidence of prehistoric sites, opportunities to observe the aboriginal land surface are sporadic. This problem with sand also was felt by the historical occupants of the Arroyo Seco land grant, and in particular by the early settlers of Greenfield. In the earliest decade of the 1900s, real estate developers established the California Homeseekers' Associations, which set aside 4,000 acres of Rancho Arroyo Seco, subdividing this property into 20 acre parcels and allowing settlers to draw for these lots. Fink relates that the new settlers had to use horsedrawn scrapers to remove the sand obscuring the soil.[43] The frequent and strong summer winds brought drifts of sand from the west. With the coming of an irrigation canal from the Arroyo Seco, even this sand-laden area was able to produce thriving farms, particularly sugar beet farms.

Impact

Structural improvements will have an irreversible impact upon any artifacts which may have remained undisturbed from ongoing agricultural activities. Development procedures, especially grading and foundation work, could destroy undiscovered prehistoric archaeological resources.

Mitigation Measures

54. In the event that a prehistoric site has been buried by wind-borne sand, making it nearly impossible to identify by a surface examination, and is encountered in project-related grading or excavation operations, the following mitigation shall apply:

Provisions shall be made in contractor's specifications. If suspected archaeological remains such as midden, burial, or concentrations of river cobbles (burned or used) are discovered during the subsurface construction, all work should stop with a 10 meter (35 foot) radius of the find. The City of Greenfield (674-5591) should be called immediately; both the Cabrillo College Archaeological Research Center (425-6294) and a local Indian advisor should be contacted. An archaeologist, in conjunction with the local Indian advisor, should evaluate any find, and preserve and/or remove it before damaging construction proceeds, destroying a non-renewable resource.

3.0 ENVIRONMENTAL ASSESSMENT

3.1 State Requirements

Section 15148, Title 14 of the California Code, specifies the requirements for Environmental Impact Reports on local General Plans. This document has been prepared to meet the requirements of state law. The programs proposed as a part of the draft policy plan elements have been addressed in this EIR, their impacts, proposed mitigation measures, alternatives and growth-inducing impacts described. This document has been prepared in a matrix form because the number of proposed programs is so great that a standard text form would be too cumbersome. Proposed programs are listed on the left side of the matrix, with each section (element) of the policy plan treated separately. The Summary briefly describes the anticipated effects of the General Plan.

3.2 Cumulative Impact

Implementation of the plan will increase the Greenfield area's population and traffic flow, degrade existing visual and air resources, create a significant impact upon existing urban services, severely impact the Greenfield School Districts and commit the use of agricultural land to urban land uses. The cumulative impacts that would result as part of implementation of this plan are described as follow:

Soils. Agricultural lands will be incrementally converted to urban uses as the City expands to the north, east and west.

Groundwater Quality. Greenfield, as well as other portions of the Salinas Valley, is experiencing groundwater quality problems. Although agricultural uses appear to be predominantly responsible for these problems, impacts of urban development (i.e., sewage treatment and runoff) may contribute to the cumulative regional water quality problems.

Viewshed. The natural viewshed in the area surrounding the Greenfield planning area will be changed with the implementation of this plan. Adjacent uses include row crop agriculture, vineyards, pasture land and rural farm structures. The change to urban structures at a higher density not only limits that viewshed area, but changes the immediate rural character of the area.

Traffic and Circulation. The addition of 33,000 daily traffic movements to Greenfield's streets upon full implementation of this plan will be significant. Existing circulation problems will be intensified as development occurs within the Planning Area.

Air Quality. A decrease in air quality is inevitable with the implementation of this plan. Individual developments will not alone create a significant air quality problem. However, the cumulative effect of additional traffic movements, residences and expected industrial uses in the area will add to a gradual air quality degradation. In addition, air quality could be affected on a short term basis by agricultural and construction activities in the Greenfield area.

Services. Over the time span of the General Plan, additional water will be consumed and water system improvements may be necessary. The City's sewage treatment facility will be impacted significantly, being currently near capacity. Other City services, including police and fire protection, schools and demand for parks, also will be impacted to varying degrees, depending upon the type and rate of growth.

3.3 Summary of Program Impacts: LAND USE

Program	Impacts/ Adverse Effects	Mitigation Measures	Alternatives	Growth Inducing Impacts
1. Use zoning, subdivision & permit review requirements, as well as other devices such as the Capital Improvement Program & Annual City Budget to accommodate planned change & growth.	None.	This program is itself a mitigation measure to accommodate planned growth.	The No Program alternative will disrupt planned growth in Greenfield.	Will provide for growth in a planned and orderly manner.
2. Use the Land Use Plan Map to identify the amount, location, mix distribution, density & intensity of various land uses.	None.	This program will guide future growth in Greenfield according to the Land Use Plan.	No program; modify land use designations on the Land Use Plan.	The Land Use Plan will provide for future growth and a mix of land uses.
3. Revise the City's zoning ordinance, text & map, to make them consistent with land use designations.	Zoning designations will be changed to conform to proposed land use designations.	None.	State law requires local zoning to be consistent with the Land Use Plan.	Zoning will implement future land use. Higher densities may be introduced in some areas.
4. Revise the subdivision ordinance to make the regulation of land divisions consistent with General Plan policies and standards.	Same as #3, above.	None.	No program.	Same as #3, above.

Program	Impacts/ Adverse Effects	Mitigation Measures	Alternatives	Growth Inducing Impacts
5. Adopt annexation policies consistent with the General Plan policies on the timing of growth & established urban service areas. Pursue the adoption of a Sphere of Influence Study for the City of Greenfield consistent with General Plan policies & land use designations.	This program will lead to the adoption of an urban service boundary for the City, designating areas to be provided with urban services.	None are proposed.	The No Program alternative could delay future annexations of unincorporated lands to the City.	Will allow additional development in the planning area. Impacts are described in Section 2 of this Report.
6. Create urban service areas, designating areas to receive sewer, water and other municipal services for up to 5 years.	Will allow development in designated areas, compatible with the City's ability to provide urban services.	See Mitigations outlined in Section 2 of this Report.	Same as #5, above.	Same as #5, above.
7. Encourage the infilling and intensification of land use consistent with existing neighborhood patterns in the already undeveloped areas of the City currently served by municipal services.	Will allow development to occur in existing areas of City where urban services are available.	See Section 2 of this Report.	The No Program alternative will encourage unnecessary encroachment onto agricultural lands.	None. Urban Sprawl will be discouraged.

Program	Impacts/ Adverse Effects	Mitigation Measures	Alternatives	Growth Inducing Impacts
8. Preserve lands designated as "Agricultural" and "Agricultural Reserve" on the Land Use Plan Map through the Year 2000.	Does not allow for conversion of productive agricultural lands to other uses until Year 2000; allows for eventual conversion of agricultural lands.	Do not permit development on agricultural lands that are not contiguous to City boundaries & promote infilling within the City prior to converting agricultural lands. Ensure that future development does not adversely impact the continued viability of agricultural operations.	None are proposed.	See # 9, below.
9. Encourage the preservation of agricultural land uses within the proposed planning concern area by coordinating city/county land use policy.	Urban growth will occur to the north, west & east. Agricultural lands to the north will be converted to urban residential uses at some undetermined time in the future.	This program will guide future growth away from more prime agricultural soils to the south-west & south-east.	Encourage development in other directions will encroach upon more prime agricultural lands & existing agriculture.	Development will be allowed to the north.

Program	Impacts/ Adverse Effects	Mitigation Measures	Alternatives	Growth Inducing Impacts
10. Lands designated on the Land Use Plan Map as "Residential Reserve" which are in agricultural production should not be converted to residential uses until the following findings are made: that development of the land will contribute to the establishment of a stable urban limit; & that 90% of the developable land designated in the City for residential uses has been developed.	This program guides the timing of future urban expansion onto agricultural lands but would discourage development on certain lands until the major portion of the City lands are developed.	This program is a mitigation measure leading to the establishment of a stable urban limit.	"No Program" would not provide for expansion areas for future growth; land use designations could be modified.	Ensures that future growth in the planning area will occur in an orderly and timely manner.
11. Maintain the pattern of development within the existing city; and, in undeveloped areas in and outside the City, encourage new development patterns that would allow for a residential mix.	Will tend to stabilize existing development patterns in the City; new development will be encouraged to provide mix of residential types.	This program is itself a mitigation measure.	The No Program alternative may not provide for a mix of residential dwellings.	This program may allow higher density development in portions of the City, placing a higher demand for services.

Program	Impacts/ Adverse Effects	Mitigation Measures	Alternatives	Growth Inducing Impacts
12. Protect rural views through development regulations, landscape plans & sensitive location of buildings & public facilities.	Preservation of rural views will be encouraged through development regulations; will require specific City policy implementation.	This program is itself a mitigation measure.	The No Program alternative would not provide for protection of rural views.	None.
13. Identify and protect entrances to the City by recognizing and presenting urban/rural transition areas & by landscaping City entrances in a manner that would be attractive & would not adversely affect the economic development of the area.	Entrances to the City will be identified and designated as areas requiring specific measures to ensure an attractive presentation.	This program is itself a mitigation measure.	The No Program alternative would not promote the beautification of urban/rural transition areas.	None.
14. Develop a design overlay zone which would be used along sensitive visual areas to implement landscape & setback requirements & architectural review.	Would provide for overall beautification of the City, would require the addition of a zoning designation & specific requirements to the City's zoning ordinance.	This program is itself a mitigation measure.	The No Program alternative would not provide for the protection of sensitive visual areas.	None.

Program	Impacts/ Adverse Effects	Mitigation Measures	Alternatives	Growth Inducing Impacts
15. Use the Land Use Plan Map of the General Plan as a guide for future residential development.	Provides an area to accommodate future housing demands, but will convert some agricultural lands to residential uses at an undetermined point in the future.	Same as #8 & #10, above.	Modify Land Use designations.	Will provide for higher densities in some areas within the City.
16. Use specific plans & planned unit development regulations to define specific land use policy, encourage residential development sensitive to surrounding uses & provide adequate services.	This program will provide for orderly development within the City.	This program is itself a mitigation measure.	None are proposed.	None.
17. The scattered siting of mobile homes throughout the City should be discouraged by the zoning ordinance.	A combining district including mobile homes would be added to the zoning ordinance, which would concentrate mobile homes in certain areas in City, subject to approval by City Council.	Develop combining district in coordination with City staff.	The No Program alternative would allow scattered siting of mobile homes.	This program would require services to be provided to mobile homes in City in specified areas.
18. Provide for adequate park space & facilities in Greenfield to serve needs of all segments of the community.	A financial impact will occur.	None are proposed.	The No Program alternative will not provide for adequate parklands.	None.

Program	Impacts/ Adverse Effects	Mitigation Measures	Alternatives	Growth Inducing Impacts
19. Acquire parkland space through developer in-lieu fees required from private developers.	This program will transfer the burden of providing park space for new development from the City to the consumer.	None are proposed.	Local government provide park space. Provide no additional parks.	None.
20. Encourage low maintenance type parks and open space.	Costs of park maintenance will be lower as a result of this program.	This program is itself a mitigation measure.	The No Program alternative will be more costly.	None.
21. With new development, require developers to share with the community the responsibility of ensuring that adequate public facilities will be provided to serve increased community need.	This program will increase development costs, but will help ensure that new developments assist the City in defraying the costs of providing additional services.	This program is a Mitigation Measure.	Same as #20, above.	None.
22. Reduce through traffic on local neighborhood streets and maintain them strictly for residential traffic.	Will help to reduce traffic hazards on neighborhood streets.	This program is a Mitigation Measure.	None are proposed.	None.
23. Provide for neighborhood and convenience stores within easy walking distance of residential areas.	Same as #22, above.	The siting of stores is subject to City approval.	The No Program alternative would increase traffic on streets	Would allow further extension of services into neighborhood areas.

Program	Impacts/ Adverse Effects	Mitigation Measures	Alternatives	Growth Inducing Impacts
24. Create a neighborhood character in areas to be built with single family dwellings by discouraging any development other than residential in residential zones.	Commercial uses would be discouraged in residential areas.	This program is itself a mitigation measure.	The No Program alternative may allow other types of development to occur in residential zones.	None.
25. Require on & off site service improvements to be completed with construction such as water, sewer & street development, schools & parks, landscaping, both on site & to local streets, noise attenuation & drainage improvements.	This program will increase development costs, but will help ensure that new developments assist the City in defraying the costs of providing additional services.	This program is itself a mitigation measure.	If this program is not implemented, facilities & improvements will have to be provided by other means, i.e., the local government incurring the costs or an assessment district with the costs shared by the property owners.	None.
26. Use the Land Use Plan Map of the General Plan as a policy statement on future as well as current commercial & industrial development.	The Land Use Plan Map will guide future development, will require action to rezone certain areas to be in conformance with Land Use Plan Map.	Each development project should be specifically reviewed for conformance with the General Plan.	None are proposed.	Additional commercial & industrial development may create an increased demand for residential units & services.

Program	Impacts/ Adverse Effects	Mitigation Measures	Alternatives	Growth Inducing Impacts
27. Preserve the City's industrial land for future industrial development & actively encourage the addition of industrial enterprises in Greenfield.	The addition of industrial enterprises will create an additional demand for residential units and urban services & will expand the socio-economic base of Greenfield.	Individual project review shall take place for industrial development.	Industrial Development at a lower intensity; additional development controls to assure adequate environmental mitigation measures.	Additional jobs will be created in Greenfield by future industrial development, creating a need for additional growth in the commercial & residential sectors.
28. Revise the Zoning Ordinance to establish industrial zones which designate intensive industrial use and light research-type activity and revise the zoning map to reflect these designations.	Will encourage compatible land uses by eliminating heavy industrial uses adjacent to neighborhood residential.	This program is a Mitigation Measure.	None are proposed.	None.
29. Utilize land use regulation and non-constricting design control standards in light industrial areas, implemented through the development review process.	Will ensure that light industrial areas are attractive.	Development review process is subject to review of City	None are proposed.	Will determine type of industrial growth to occur in Greenfield.

Program	Impacts/ Adverse Effects	Mitigation Measures	Alternatives	Growth Inducing Impacts
30. Re-define "professional" in the City's Zoning Ordinance and relate it to the residential sector and/or create a new zoning overlay identified as Professional (P) to provide for this type of use in conjunction with residential and/or commercial uses.	Will define and provide for a compatible area of professional uses within the City, but may utilize land otherwise used exclusively for residential uses.	The Zoning Ordinance should clearly specify the criteria for locations of professional uses.	No Program.	None.
31. Make the distinction in the City's zoning ordinance between a strict light commercial "C-1" district & Neighborhood Commercial & apply it to those areas deemed appropriate.	Will encourage compatible land uses by eliminating inappropriate commercial uses in neighborhood areas.	None.	None are proposed.	None.
32. A zoning overlay should be developed for the commercial area along El Camino Real.	Encourages compatible land uses & attractive frontage for these service commercial areas.	None.	None are proposed.	None.

Program	Impacts/ Adverse Effects	Mitigation Measures	Alternatives	Growth Inducing Impacts
33. Enhance the City's central business district by concentrating the area in functional & efficient manner, creating an attractive center for retail services & social activities & by promoting development of commercial shopping facilities to serve local residents.	Will centralize businesses in the downtown area. Some financial impacts will occur as part of any revitalization effort.	Utilize architectural and design review for new developments in the downtown area.	None are proposed.	As the downtown area grows, more jobs will be created. This would create an additional demand for services.
34. Through the City's Five Year Capital Improvement Plan & Resource Improvement Format, allocate funds for the construction of roads, water & sewage treatment facilities & improvements, libraries, parks & other City government facilities.	A financial impact will occur. Efforts to seek funding are needed.	This program will help plan and provide for adequate public facilities & services in the future.	The No Program alternative will not provide for orderly growth since urban services and facilities may not be adequate.	This program will provide for facilities & services so that additional growth can occur.
35. Use the adopted Water System Master Plan for City of Greenfield in planning water system improvements.	Same as #34, above.	Same as #34, above.	Same as #34, above.	Same as #34, above.

Program	Impacts/ Adverse Effects	Mitigation Measures	Alternatives	Growth Inducing Impacts
36. Provide for adequate facility expansion in Greenfield to meet the needs of the population.	A financial impact will occur.	Parks should be located throughout the community.	The No Program alternative will not provide for adequate facility expansion.	None.
37. Through active communication with the Greenfield School District & the Gonzales High School District. Plan cooperatively for the expansion of existing school facilities & the siting of new facilities.	This program would plan for school expansion as needed.	None.	The No Program alternative would not lead to cooperative school development & would be more expensive.	None.
38. Participate in the Association of Monterey Bay Area Governments Planning Programs to ensure coordination of regional & local planning policy.	A minimal cost will be incurred.	None.	The No Program alternative would limit Greenfield in its cooperative planning efforts & ability to seek grant funding.	None.

3.4 Summary of Program Impacts: HOUSING

Program	Impacts/ Adverse Effects	Mitigation Measures	Alternatives	Growth Inducing Impacts
1. Use the Land Use Plan Map of the General Plan as policy for existing & future residential development. It should indicate housing location, type and minimum/maximum densities.	The Land Use Plan Map will guide the location & amount of future residential development.	None are proposed.	None are proposed.	Growth shall occur in designated areas. More housing will create a demand for more commercial services.
2. Encourage the production of affordable rental & ownership affordable housing.	Will result in broader distribution of affordable housing units within the City.	None are proposed.	The No Program alternative may result in fewer affordable housing units built.	None.
3. Consider providing incentives to builders, such as density bonuses or fee waivers for construction of innovative & affordable housing units.	Encourages provision of housing to all segments of community.	Development subject to review & approval of City Council.	Same as #2, above.	Development of additional housing units will occur.
4. Consider rezoning older areas within present City limits to encourage construction of higher density development such as condominiums & attached houses.	Will create higher density residential in older areas of the City and will provide a wider range of housing opportunities.	Development should be coordinated with the ability to provide urban services, i.e., water & sewer.	No Program may serve to limit availability of housing opportunities; consider these kinds of development throughout the City.	This program will encourage higher density residential uses within existing urban service areas.

Program	Impacts/ Adverse Effects	Mitigation Measures	Alternatives	Growth Inducing Impacts
5. Consider allowance of lower cost building types, such as modular type housing throughout low density residential zones as part of the Zoning Ordinance, while permitting mobile homes in areas designated as medium density.	Will allow for a broader range in housing types.	Provisions for an aesthetically coordinated neighborhood should be taken into account when developing modular type housing.	The No Program alternative is inconsistent with state law. Specific areas for modular type housing can be located to satisfy state law.	Higher densities may occur as a result of this program.
6. Maintain a balance between rental housing opportunities & home ownership by encouraging development of new units & retention of existing units.	Encourage expansion of housing supply.	Development should be coordinated with the ability to provide urban services; i.e., water & sewer.	None are proposed.	Development of additional housing units will occur according to demand.
7. Continue development & refinement of housing rehabilitation programs for low to moderate income homeowners with federal & state funds.	This program will enhance the general appearance of Greenfield, provide adequate housing, encourage repairs & increase the life of dwellings.	This program is itself a mitigation measure.	The No Program alternative will not provide for housing rehabilitation. By Rehabilitating more units per year, benefits of the programs would occur at a faster rate.	None.
8. Make maximum use of public & private resources to help solve special housing problems.	There may be a financial impact upon local public & private organizations.	None are proposed.	No Program.	This program could result in the development of additional affordable housing.

Program	Impacts/ Adverse Effects	Mitigation Measures	Alternatives	Growth Inducing Impacts
9. Address special housing needs of the City through the Housing Plan of the General Plan & the federal Housing & Community Housing Assistance Plan.	A minimal cost to the City could occur.	None are proposed.	The No Program alternative will not provide for addressing special housing needs in Gonzales	None.
10. Develop programs to provide a density bonus or other incentives to be granted to developments that include a substantial portion of affordable units.	This program will provide for higher densities as well as encourage low income	None are proposed.	A variety of programs can be devised to provide for density bonuses.	This program will permit higher densities & a higher population for the Greenfield area.
11. Evaluate the suitability of vacant parcels close to downtown for medium & high density residential development of housing for elderly & handicapped persons.	More people will be concentrated in the downtown area, leading to additional demand for parking & the potential for higher congestion.	Ensure provision of adequate public services in new developments.	Evaluate the suitability of vacant parcels in the north expansion area for elderly housing. No Program.	This program will encourage high density development on some vacant parcels near the City's downtown area, leading to an increased need for services.
12. Undertake programs that emphasize energy retrofitting in existing residential structures using insulation, weatherstripping, & solar appliances.	In the short range, development costs could be increased; in the long range, energy consumption will be reduced.	This program is itself a mitigation measure to reduce energy usage.	The No Program alternative will not encourage energy conservation in Gonzales.	None.

Program	Impacts/ Adverse Effects	Mitigation Measures	Alternatives	Growth Inducing Impacts
13. Promote the use of passive & active solar systems in new & existing residential buildings.	Owners will be burdened with initial costs; in the long range, energy consumption will be reduced.	See #11, above.	See #11, above.	None.
14. Consider creating a City Energy Task Force to work with other cities to examine potential benefits of energy incentives in relation to imposed energy regulations, & identify community priorities in energy matters.	Administrative costs will be incurred.	None are proposed.	No Program.	None.

3.5 Summary of Program Impacts: CIRCULATION

Program	Impacts/ Adverse Effects	Mitigation Measures	Alternatives	Growth Inducing Impacts
1. Recognize & maintain the street classification system, as illustrated on the Circulation Map that identifies functions of different types of streets for future planning & provide for through traffic on arterial and collector streets.	Circulation & traffic will be increased on existing streets & will follow the proposed street pattern in the future.	This program is itself a mitigation measure to plan for development in Greenfield's expansion areas.	The No Program alternative will not provide for a classification of streets in Greenfield.	None.
2. Evaluate street maintenance & improvement programs annually & incorporate needed improvements within a Capital Improvement Plan.	Administrative costs will occur in addition to capital improvement costs.	This program is itself a mitigation measure to insure that needed street improvements occur.	The No Program alternative will not provide for the constant evaluation of street improvement programs.	None.
3. Acquire right-of-way to widen Apple Avenue.	Will relieve access problems on narrow this street, but may create a parking problem.	This program is a Mitigation Measure.	The No Program alternative will allow access problems to continue; street widening may be costly.	None.

Program	Impacts/ Adverse Effects	Mitigation Measures	Alternatives	Growth Inducing Impacts
4. Ensure adequate street widths for emergency vehicle access in new developments.	This program will reduce traffic congestion, and allow for increased traffic flows, but may require additional street dedication by developer.	This program is a mitigation measure to provide adequate circulation patterns.	No Program.	None.
5. Ensure street designs and public improvements that provide adequate pedestrian protection.	Provides safety measures.	This program is a Mitigation Measure.	None are proposed.	None.
6. Consider development of an additional parking lot in the downtown area.	A financial impact will occur, requiring implementation and maintenance costs.	This program will reduce parking and congestion problems in the future.	No Program.	This program may enhance commercial growth in Greenfield.
7. Review off street parking standards for residential and commercial uses annually to ensure adequate parking provisions.	A minimal expense to the City.	This program is a mitigation measure to prevent potential traffic problems.	No Program.	None.
8. Support County programs that provide transportation services to the elderly and handicapped.	None.	None are proposed.	No Program.	None.

Program	Impacts/ Adverse Effects	Mitigation Measures	Alternatives	Growth Inducing Impacts
9. Meet all reasonable transit needs, where feasible.	Will provide efficient transportation for everyone.	This program is a mitigation measure.	No Program.	None.
10. Encourage development of bicycle paths in new residential developments.	Cost of providing paths will be passed on to future residents.	None are proposed.	No Program.	None.

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Appendix A
Initial Study

Appendix B
Rossi-Foré Intensity Scale

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4.4 EMC Staff

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4.4. Survey

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INITIAL STUDY

SIGNIFICANT IMPACT	CAN BE MITIGATED		YES	NO	BASIC ENVIRONMENTAL QUESTIONS
	X				
					1. Within a high seismic hazard zone? Zone: # 3
					2. Development on slopes over 30%?
					3. Potential erosion problem?
					4. Evidence of geologic instability?
X		X			5. Soil constraints for development? Prime Agricultural Lands
					6. Potential to degrade surface water? Affected water(s)
					a. Reduce water quality?
					b. Reduce downstream availability?
	X	X			7. Potential to degrade groundwater? Increased demand for groundwater may create groundwater problems
	X	X			a. Quality?
	X	X			b. Increase overdraft?
					8. Would increased project runoff be detrimental?
	X	X			9. Within a 100 year floodplain?
					10. Eliminate vegetation? Type:
					11. Rare or endangered species? Species:
					12. Impact any unique or fragile biotic community?
					13. Impact a wildlife use area? type:
	X	X			14. Designated scenic area?
X					15. Any significant visual impact?
	X	X			16. Obnoxious odors?
X					17. Unacceptable noise?
	X	X			18. Traffic impact? Additional traffic to be added
					19. Conflict with any airport land use plan or land use?
					20. Project access inadequate?
X		X			21. Air quality degradation on a- temporary basis
X		X			permanent basis
	X	X			22. Sewage disposal problem? Sewer and water capacity will have to be increased
	X	X			23. Water supply problem?
	X	X			24. Inadequate school facilities? District:
	X	X			25. Increased fire hazard?
					26. Inadequate access for fire trucks?
					27. Extension of utilities 1/2 mile or more? To the Northern Extension Area
					28. Inefficient use of energy?
					29. Archaeological site?
					30. Historical site?
X					31. Loss of prime row crop or irrigated farmland?
					32. Loss of grazing land?
					33. Inconsistent with Growth Management Policies?
	X	X			34. Conflicts with neighboring land use? Urban/Agricultural Conflicts
	X	X			35. Generates the need for new housing? This plan will provide for housing
					36. Does not provide for low or moderate income housing?
					37. Provides no new permanent job opportunities?
					38. Adverse cumulative effect?
					39. Displace existing residents?
					40. Is growth inducing? Plan will provide for additional employment
					41. Short term benefits at expense of long-term?
					42. Irreversible commitment of land or irreplaceable resources? Agricultural Lands and Air Quality degradation, Visual impact

NOTES: Significant impacts and mitigations are discussed in the Environmental Impact Report

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